

9-1-1988

## Business Outlook, Vol. 5, No. 1, Fall 1988

Follow this and additional works at: [https://research.upjohn.org/bus\\_outlook](https://research.upjohn.org/bus_outlook)

---

### Citation

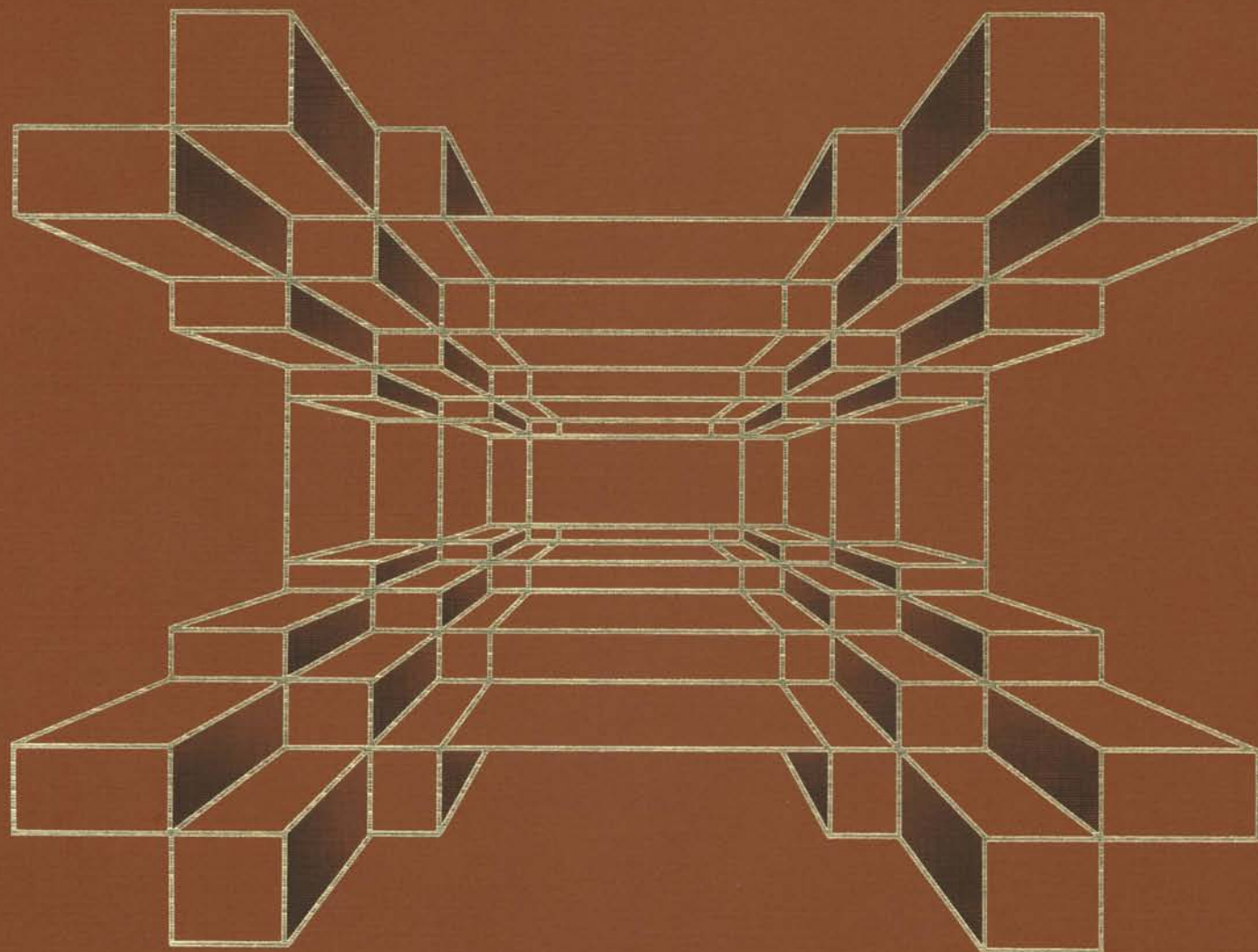
W.E. Upjohn Institute. 1988. Business Outlook for West Michigan 5(1).  
[https://research.upjohn.org/bus\\_outlook/vol5/iss1/1](https://research.upjohn.org/bus_outlook/vol5/iss1/1)

This title is brought to you by the Upjohn Institute. For more information, please contact [repository@upjohn.org](mailto:repository@upjohn.org).

# BUSINESS OUTLOOK

---

## FOR WEST MICHIGAN



### **Forecast:**

- Slower Growth Cools Inflationary Pressures

### **Feature Article:**

- Regional and Local Economic Development

**W. E. UPJOHN INSTITUTE  
for Employment Research**

---

**The Board of Trustees  
of the  
W. E. Upjohn Unemployment Trustee Corporation**

Preston S. Parish, *Chairman*

Charles C. Gibbons, *Vice Chairman*

James H. Duncan, *Secretary-Treasurer*

E. Gifford Upjohn, M.D.

Mrs. Genevieve U. Gilmore

John T. Bernhard

Paul H. Todd

David W. Breneman

Ray T. Parfet, Jr.

---

Robert G. Spiegelman, *Executive Director*  
W. E. Upjohn Institute for Employment Research

---

*BUSINESS OUTLOOK for West Michigan* is published four times a year by the W. E. Upjohn Institute for Employment Research. The Institute, a nonprofit research organization, is an activity of the W. E. Upjohn Unemployment Trustee Corporation, which was formed in 1932 for the purpose of carrying on "research into the causes and effects of unemployment and measures for the alleviation of unemployment."

# **BUSINESS OUTLOOK FOR WEST MICHIGAN**

Robert G. Spiegelman  
*Editor*

George A. Erickcek  
*Associate Editor*

Judith K. Gentry  
*Managing Editor*

Michael S. Nelson  
*Research Assistant*

*Volume V, Number 1, Fall 1988*

W.E. Upjohn Institute for Employment Research  
Kalamazoo, Michigan

Robert G. Spiegelman, *Executive Director*



## Contents

Business Outlook Discussion Paper	
A Perspective on Regional and Local Economic Development	
Robert G. Spiegelman and George A. Erickcek .....	1
Business Outlook for West Michigan	
Slower Growth Cools Inflationary Pressures .....	5
Business Outlook for the Battle Creek MSA .....	10
Business Outlook for the Benton Harbor MSA .....	12
Business Outlook for the Grand Rapids MSA .....	14
Business Outlook for the Kalamazoo MSA .....	16
Business Outlook for the Muskegon MSA .....	18
Appendix Tables	
• Index of Help-Wanted Advertising .....	21
• Index of Leading Indicators .....	21
• Components of the Index of Leading Indicators .....	22
• Employment Data for West Michigan MSAs and Michigan .....	23
• Vacancy Rates for Selected Metropolitan Statistical Areas (MSAs) in Michigan .....	24
• Population by Sex and Age: Michigan and Five Metro Areas in West Michigan .....	24
• Average Residential Contract Mortgage Rates in Michigan .....	25
• Consumer Price Index .....	25
• Selected Labor Market Indicators .....	26
• Commercial Banking Data .....	26
• Population and Income Update for Selected Areas .....	27

We gratefully acknowledge the following businesses and organizations  
as sponsors of *Business Outlook*.





---

# The BUSINESS OUTLOOK

## DISCUSSION PAPER

---

### A Perspective on Regional and Local Economic Development

Robert G. Spiegelman and George A. Erickcek

We thought that smoke-stack chasing was no longer the primary focus of local economic development efforts—that it had gone out of vogue with the hoola hoop. Not so. Although the businesses currently being wooed do not usually belch smoke, the hope for the big kill still pervades the thinking in council chambers and local development organizations. Thus, David Birch's new book, *Job Creation in America*, still has an important audience to reach.

#### *Small Business Creates Jobs*

David Birch's work on job creation became widely known with the 1979 publication of his book: *The Job Generation Process*, which changed radically the thinking about the relative roles of large and small business in economic development.<sup>1</sup> In his new book, Birch examines data from 1981 to 1985 and unearths further evidence in support of his earlier findings.<sup>2</sup>

All net employment growth between 1981 and 1985 was due to start-ups (less deaths) and expansions (less contractions) of establishments with fewer than 100 employees at the start of the period, according to Birch. Single unit companies employing fewer than 100 employees accounted for over 90 percent of overall net job growth through their expansions (less contractions) and start-ups (less closings) from 1981 to 1985. The emphasis on small firms should not be misunderstood, however. The firms are small at birth, but, if successful, they become large firms. Thus, it is *expansion* of small start-ups that is mainly responsible for growth in an area.

This information, unfortunately, does not make the task of precipitating growth an easy one. Most small firms do not expand dramatically, but rather either stay small or die. Approximately 50 percent of all start-ups die within five years. Moreover, Birch found that there was an inverse correlation between growth in one two-year period and growth in the next two-year period; i.e., if a firm grows in period 1, it is more likely to decline in period 2, and vice versa. However, firms that are able to grow in both periods would be more likely to grow in period 3 also.

How do you identify potential winners? According to Birch, it is definitely not easy, and the only reliable key is

the desire of the small business person to be a winner. The small business operator must be an innovator and an entrepreneur; i.e., he/she needs an idea of how to do something different or better, and needs the drive to want to be big. Even most of these people will not make it big, but those who do succeed are the ones that will make a real contribution to an area's growth.

#### *Current Economic Development Policies Misguided*

Existing economic development policy emphasizes all the wrong things, claims Birch. First, it should be less concerned with the death of firms, because the rate of firm closings is about the same in both growing and declining areas. If anything, it is slightly higher in growing areas. Firm death may be a necessary consequence of entrepreneurship. In Europe, the rate of firm deaths is very low, but so is the rate of firm openings and so is growth. Firm death may be the price of growth; thus, some policies designed to prevent firm death may be counterproductive.

Local economic development policies that would entice existing businesses to relocate to their area are also off the track. Effort and money spent to attract existing businesses will likely be wasted, because very few firms move, and most of those who do confine the move to within the same metropolitan area. Efforts to attract a branch plant of an existing large company would probably be futile, but even if successful, would expose the area to serious employment instability. Marie Howland, in her recently published study, *Plant Closings and Worker Displacement: The Regional Issues* (Upjohn Institute 1988), confirms Birch's finding that plant closings are uncorrelated with growth and finds that the only significant predictor of closing is whether the firm was a branch plant. In times of distress, a branch plant is much more likely to close than a locally owned business.

#### *Using the Correct Tools for the Job*

Local economic developers should encourage entrepreneurs to start new businesses in their area. Even area development specialists who focus on assisting innovative entrepreneurs may still use the wrong tools. Tax concessions, free land, or low cost labor are not likely to entice entrepreneurs into the local area, since entrepreneurs



care much more about growth potential than about costs of production.<sup>3</sup> What are the inducements that will attract entrepreneurs? According to Birch and others, they are the following:

- A high-powered university, one that emphasizes research;
- High quality labor, demonstrated by high levels of education and a strong work ethic;
- High quality local government: one that provides a high level of service and operates with a high level of tax efficiency;
- Excellent telecommunication services and good air service;
- Good business support services; i.e., legal services, accounting services, printing, etc.;
- Good quality of life, especially excellent public education for children of employees;
- Availability of financial resources to support growth.

The areas that meet these criteria are the ones that have grown and will continue to do so. San Francisco, Boston, and Minneapolis are all high cost areas, face high tax bills, and yet are experiencing substantial growth. Minnesota has the best growth record in the midwest, yet is one of the highest tax states in our region, as shown in Table 1. On the other hand, employment growth in Indiana, the region's lowest tax state, has not been substantially above Michigan's growth rate.

**Table 1**  
**Employment Growth and State Tax Effort**

	Percent change in employment <sup>a</sup> 1980-1987	1985 tax effort index <sup>b</sup> (U.S. avg. = 100)
Illinois	0.1	106
Indiana	7.8	96
Michigan	7.5	120
Minnesota	10.7	119
Ohio	4.1	103
Pennsylvania	3.4	102
Wisconsin	6.9	128

NOTE: Tax effort is calculated by dividing a state's actual tax collection by its estimated tax capacity and multiplying by 100. Tax capacity is defined as the dollar amount of revenue that each state would raise if it applied a nationally uniform set of tax rates to a common set of tax bases. A Tax Effort Index value of over (under) 100 implies that the state is exploiting its tax capacity at above (below) the national average rate. For example, Michigan's index value of 120 indicates that its tax effort is 20 percent above the national average.

a. Data from U.S. Department of Labor, Bureau of Labor Statistics.

b. Data from Advisory Commission on Intergovernmental Relations (ACIR). *Measuring State Fiscal Capacity, 1987 Edition.*

## **West Michigan and Small Business Development**

Birch's data indicate that West Michigan's business environment is conducive to small business expansion. Among 329 areas spanning the nation, West Michigan's metropolitan areas ranked in the top quartile in terms of the percentage of significant small business expansion, as shown in Table 2. Birch's findings also show, however, that West Michigan is just average in the percentage of significant new start-ups from 1981 to 1985. The Benton Harbor/South Bend area is the only exception, as it enjoyed an outstanding growth in small business start-ups.<sup>4</sup> The rural counties of lower Michigan, like most rural areas nationwide, were found to have problems in nurturing new businesses.

**Table 2**  
**Small Business Development in West Michigan**  
**1981-1985**

Area	National ranking*	
	Growth** rate	Birth*** rate
South Bend/Benton Harbor <sup>a</sup>	21	29
Grand Rapids/Muskegon <sup>b</sup>	35	129
Kalamazoo/Battle Creek <sup>c</sup>	54	156
South Rural Michigan <sup>d</sup>	205	215

SOURCE: David Birch, *Job Creation in America* Figures 6.1 and 6.2.

\*Ranking out of 239 areas covering all 50 states.

\*\*Ranking of Area's Growth Rate of Companies that started between 1977 and 1981 and grew significantly between 1981 and 1985.

\*\*\*Ranking of Area's Growth Rate of 1981-85 Start-Up Companies that had a workforce of 10 or more by the end of 1985.

a. Elkhart, St. Joseph (IN) and Berrien Counties.

b. Kent, Muskegon and Ottawa Counties.

c. Kalamazoo and Calhoun Counties.

d. Allegan, Barry, Branch, Cass, Gratiot, Hillsdale, Huron, Ionia, Isabella, Lenawee, Montcalm, St. Joseph, Sanilac, Shiawassee, Tuscola, and Van Buren Counties.

West Michigan has a growing number of excellent resources available to entrepreneurs, including small business assistance centers in each of the major metropolitan areas. Here we are going to highlight two outstanding area resources available to innovative small business: the Research and Technology Institute of West Michigan (RTI) and Western Michigan University's Paper and Printing Science and Engineering Program.

RTI is a new, nonprofit corporation which brings together the research, training and technical assistance resources of the major colleges and universities in West Michigan, including Michigan State University, Grand Valley State University, Western Michigan University, Ferris State University and Grand Rapids Junior College. For the entrepreneur, RTI offers research and development facilities

and technical assistance which were not available before. RTIs applied research and development activities will soon cover many areas, from manufacturing process controls to opto-electronics, and will be industry driven. In addition to providing R & D facilities for industry, RTI provides technical assistance to firms in implementing new production methods or technologies and can develop technology training programs for a firm's workforce. Located in Grand Rapids, RTI services are available to firms throughout West Michigan.

Western Michigan University's Paper and Printing Science and Engineering Program provides both training and research and development facilities for West Michigan's paper and printing industry. The paper program was established in response to industry needs and has continued to receive industry support. The university operates several research and technology laboratories in both fields, including a "wet lab" for small scale paper preparation, a microscopy laboratory for fiber identification, and a lab pertaining to lithographic, flexographic, gravure, and screen process printing.

### ***Should Economic Developers Target Industries for Development?***

In considering the potential for new industries in the area, an important question facing the local development agencies is whether to target their marketing efforts on specific industries. Targeting involves the development of a list of those industries which would enjoy a comparative advantage in the area. Such an advantage could be the quality of the area's labor force, market location, existing industrial base, natural resources or a list of other factors.

On the surface, targeting appears to be a reasonable approach; however, its implementation faces significant difficulties. The target list generated is typically much too long or contains industries at such a high level of aggregation as to be operationally meaningless. Identified strengths of most areas are of value to many industries and exist in many locations. In addition, it is difficult to determine what exactly most firms are looking for in a location. There are enough stories about firms basing their location decisions on such noneconomic factors as the residence of in-laws or family preferences for certain recreational pursuits to cause the most ardent supporter of targeting to throw up his/her hands in frustration.

One form of targeting can be successful, and that relates to the expansion prospects of successful industries already in the area. In other words, success breeds success. The area's most successful industry sector will generate a high number of new entrepreneurs. A worker in this sector may find a new, more efficient way of doing things and start his/her own firm. The worker's new firm may become a

competitor, a supplier, or an end-product user of the former firm's product. The history of the office furniture industry in Grand Rapids, for example, is full of such success stories.

Targeting suppliers and customers of successful industry sectors may also be a fruitful strategy. As a dominant industry grows larger in the local area, it becomes profitable for suppliers, and in some instances customers, of industry to locate in the same vicinity, thereby reducing transportation and communication costs. Such suppliers may be entrepreneurs who emerge from the existing industry, or may be outside firms relocating or establishing branch plants.

An important goal for an area's economic developers is to ensure that potential entrepreneurs know about the local area's attributes and the facilities available to assist business endeavors. Furthermore, developers should smooth the entrepreneurs' path by helping them make the appropriate linkages, e.g., to local government for services, to the local financial institutions for loans, to the colleges and universities for personnel and training, etc. Of course, there are the basic business needs for space and utility services that also must be met in any location, and a development organization can certainly help meet these needs as well.

Finally, while local economic developers must maintain and enhance their ability to provide information to visiting prospective businesses, they should be wary of becoming traveling real estate hawkers. Aggressive attraction campaigns are expensive, high-risk ventures; they may sound bold and sexy, but hold little chance of success. It is far easier for a prospective firm to find an area than for an area to find the firm. As noted above, only a few firms move or open new facilities outside of their existing area, and it is nearly impossible to identify such firms beforehand.

### ***The Appropriate Strategy for Local Economic Developers***

We believe that the following are the appropriate strategies for local area economic development efforts.

- Concentrate attention on aiding and abetting the start-up of new companies, especially those by innovative entrepreneurs with a desire for expansion.
- Provide support for the initial expansion of existing small businesses.
- Get the area's governmental house in order so that public services can be provided efficiently. Worry more about the quality of service and less about being the low-tax area.
- Be sure local schools are first rate.
- Encourage local universities and colleges to develop specific areas of expertise that could gain wide recognition and could support economic development efforts,

e.g., Western Michigan University's program in paper technology or the Research Technology Institute of West Michigan.

- An attraction effort should primarily be based on providing accurate, complete and relevant information to business people who show an interest in the area, and to be certain that he/she is aware of the support system available for a new business in the area.
- If an external attraction program is to be launched, it should concentrate its efforts on the strong industries already in the area that show promise of continued growth; e.g., health care and finance in Kalamazoo or office furniture in Grand Rapids.
- If a plant closing or a company leaving the area can be prevented at reasonable cost then do so, but don't fret about closings, since they are inevitable.

### NOTES

1. This initial study, *The Job Generation Process* (MIT: Cambridge, MA), 1979, was seriously flawed, however. Armington and Odle pointed out in

their Brookings paper that Birch had incorrectly included branch plants of larger firms in his category of small establishments and that his results were significantly altered by correcting for this mistake. Birch had claimed that 79 percent of employment growth from 1978 to 1980 was created by establishments with fewer than 100 employees; whereas, Armington and Odle found that only 39 percent of net new jobs were created by establishments in *firms* with fewer than 100 employees. (Armington, C. and M. Odle, "Small Business—How Many Jobs?" *The Brookings Review*, Winter 1982).

2. David Birch has assembled a completely unique body of data on 12 million individual American business enterprises, tracking their histories from 1969 through 1986. The basic data came from Dun and Bradstreet, which twice yearly records the births and deaths of firms as well as their employment and other data. According to Armington, the error in the first study has not been fully corrected in the new study. Her analysis indicates that in the period 1984-87 about 60 percent of employment growth was in small firms (based on a telephone conversation, 7/11/88).

3. Within a local area, the offering of tax concessions and the like can cause harmful competition among cities and townships. They would all be better off if none of them offered concessions to expanding local firms, since they are most likely to relocate in the area anyway.

4. Since Birch grouped the Benton Harbor MSA with South Bend and Elkhart, Indiana, it is impossible to determine which state the majority of the new business start-ups took place.

---

---

# The BUSINESS OUTLOOK for WEST MICHIGAN

---

---

## Slower Growth Cools Inflationary Pressures

George A. Erickcek

---

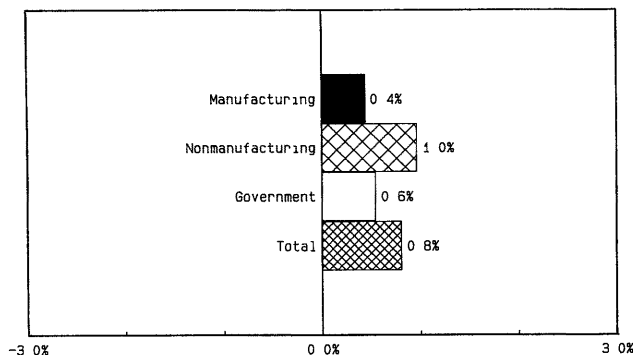
Total employment in West Michigan rose 0.6 percent in the third quarter of 1988. Employment in manufacturing increased 0.6 percent and in nonmanufacturing 0.9 percent. Government employment declined 0.6 percent. In spite of a surprising drop in the region's Index of Help-Wanted Advertising, we expect continued moderate employment growth in West Michigan during the final months of 1988, especially in the manufacturing sector. Employment growth at the state and national level, on the other hand, may slow.

---

### *The National Setting*

The Gross National Product (GNP) grew at a modest 2.6 percent annual rate in the third quarter, down slightly from its 3.0 percent pace in the previous quarter. The summer drought, a drop in defense spending, a jump in imports, and slower growth in capital expenditures combined to curb growth in the quarter. According to Department of Commerce estimates, the drought alone subtracted 0.6 percent from the quarter's GNP growth rate.

**Chart 1**  
**United States Employment**  
**Percentage Change, Third Quarter 1988**



SOURCE: Based on U.S. Department of Labor data.

Consumer spending returned as the driving force in the national economy, growing at a strong 4.0 percent annual rate in the third quarter. A substantial shift in spending patterns occurred, with consumers loading their shopping carts with nondurable goods instead of durable goods as in the second quarter. Consumer spending on nondurable goods rose 5.4 percent, while spending on durables increased 1.1

percent; in the previous quarter these growth rates were 0.4 percent and 9.8 percent, respectively. Personal consumption expenditures on services rose sharply in the third quarter, reaching an annual growth rate of 4.7 percent, compared to its slower 2.8 percent annual rate in the second quarter.

The quarter's buying spree was partially financed by a jump in disposable personal income. Disposable personal income grew at a healthy 5.6 percent annual rate in the third quarter, compared to a zero percent growth in the previous quarter.

With the rise in consumer spending, growth in imports soared from a negative 3.7 percent annual rate in the second quarter to a positive 11.6 percent annual rate in the third quarter. Exports matched imports as they also grew a healthy 11.6 percent, topping their second-quarter pace of 9.1 percent. The U.S. merchandise trade deficit shrank 5.4 percent in the third quarter. The quarter's \$28.5 billion deficit was the smallest since the first quarter of 1985.

Defense spending weakened significantly in the third quarter, falling at a 11.7 percent annual rate. With a slight 1.8 percent growth in nondefense spending, federal expenditures declined 9.1 percent in the third quarter. State and local governmental expenditures grew by a modest 1.7 percent annual rate, down from its 3.2 percent rate in the second quarter.

The nation's industries curtailed their expenditures for capital equipment and structures in the third quarter. Expenditures for producers' durables, which raced at an outstanding 19.2 percent annual growth rate in the second quarter after an even higher 21.6 percent growth rate in the first quarter, dropped to a 5.5 percent growth rate in the third

**Table 1**  
**Michigan (Statewide) Statistics**  
(Adjusted for seasonal variations)

Measure	1988 third quarter	1988 second quarter	Percent change second to third	1987 third quarter	Percent change third to third
Employment:					
Manufacturing .....	929,490	934,750	-0.6	949,150	-2.1
Nonmanufacturing .....	2,195,660	2,188,970	0.3	2,123,610	3.4
Government .....	615,060	623,510	-1.4	607,660	1.2
Total .....	3,740,210	3,747,230	-0.2	3,679,760	1.6
Unemployment:					
Number unemployed .....	332,890	320,030	4.0	379,410	-12.3
Unemployment rate .....	7.3	7.1	0.2	8.3	-1.0
State indexes:					
Help-wanted ads:					
Detroit .....	181	173	4.6	170	6.5
West Michigan (5 MSAs) .....	290	293	-1.0	269	7.8
Leading indicators (statewide) .....	154	155	-0.6	152	1.3
State components:					
Average weekly hours .....	43.0	43.6	-1.4	41.5	3.6
UI initial claims .....	17,273	16,931	2.0	16,496	4.7
New dwelling units <sup>a</sup> .....	49,227	48,358	1.8	47,996	2.6

SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, help-wanted index from The Conference Board and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

**Table 2**  
**West Michigan (5 MSAs) Statistics**  
(Adjusted for seasonal variations)

Measure	1988 third quarter	1988 second quarter	Percent change second to third	1987 third quarter	Percent change third to third
Employment:					
Manufacturing .....	182,700	181,610	0.6	177,400	3.0
Nonmanufacturing .....	350,300	347,080	0.9	331,790	5.6
Government .....	77,510	77,940	-0.6	76,250	1.7
Total .....	610,510	606,630	0.6	585,820	4.2
Unemployment:					
Number unemployed .....	38,660	36,620	5.6	45,740	-15.5
Unemployment rate .....	5.6	5.4	0.2	6.8	-1.2
Local indexes:					
Help-wanted ads .....	290	293	-1.0	269	7.8
Leading indicators .....	151	144	4.9	142	6.3
Local components:					
Average weekly hours .....	41.6	41.8	-0.5	40.9	1.7
UI initial claims .....	2,098	2,275	-7.8	2,344	-10.5
New dwelling units <sup>a</sup> .....	9,008	7,234	24.5	7,533	19.6

SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, ad counts from five daily newspapers and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

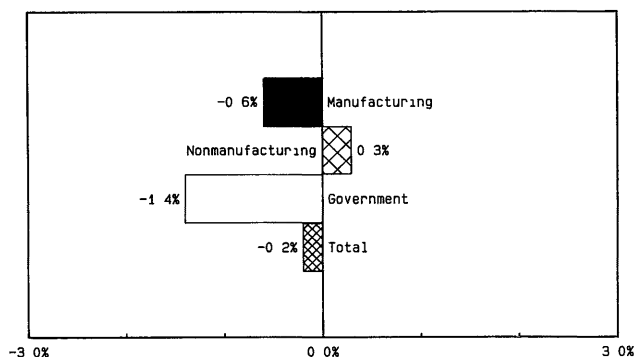
quarter. Expenditures for nonresidential structures grew a modest 3.2 percent in the third quarter, down from their 3.3 percent growth rate in the previous quarter.

Presently, the modest growth in the nation's economy has dampened inflationary pressures. The annual rate of growth of the implicit price deflator dropped to 4.7 percent in the third quarter, from a 5.5 percent pace in the second quarter. Moreover, the September consumer price index (CPI) slowed to a more moderate 4.2 percent annual rate, down from its 5.2 percent rate in August. The Federal Reserve (FED) may have been successful with its preemptive strike against inflation in the second quarter when it increased its discount rate.

On the production side, however, unit labor costs, which have been falling over the past five years, crept up 0.7 percent over last year's rate in the third quarter. Unit labor cost is the labor cost per unit of output and rises when wages and benefits outpace productivity gains. With the 5.5 percent unemployment rate in the third quarter (5.3 percent in October) and the nation's factories currently running at near capacity levels, it is likely that unit labor costs will continue to rise slowly. Given the slight slowdown in the national economy, manufacturers may be expected to shift their capital expenditures away from expanding capacity and toward improving operating efficiency in a renewed effort to control unit labor costs.

In fact, productivity did rise in the third quarter, but only at a low 1.3 percent annual rate. Productivity gains are more difficult to achieve when manufacturers are operating at near capacity levels. In the third quarter, the nation's factories were operating at 83.8 percent of capacity, up slightly from the second quarter's capacity utilization rate of 83.2 percent. Greater utilization of capacity, however, could begin to result in shortages and breakdowns.

**Chart 2**  
**Michigan Employment**  
**Percentage Change, Third Quarter 1988**



SOURCES: Based on U.S. Department of Labor and Michigan Employment Security Commission data.

There are conflicting signs about the current strength of the national economy. October's unemployment rate of 5.3 percent suggests that the national economy is still very strong. On the other hand, in November nearly 80 percent of the contributors to the *Blue Chip Economic Indicators* revised their forecast of the final 1988 GNP growth downward, and the average estimate of the year's GNP growth dropped from 4.0 to 3.8 percent.

### *The State of Michigan*

Total employment in the state declined 0.2 percent in the third quarter, due in part to a major model changeover in the auto industry. Total employment has increased 0.7 percent over the past four quarters. Employment in manufacturing fell 0.6 percent, offsetting a 0.4 percent increase in the second quarter. Employment in government dropped 1.4 percent, more than erasing its 0.2 percent growth in the previous quarter. Employment in nonmanufacturing continued to grow, rising a moderate 0.3 percent. In the second quarter employment in nonmanufacturing rose 0.9 percent.

Employment in the auto industry fell sharply in the summer months when several of the state's assembly lines were temporarily shut down to retool for next year's model cars. From June to August, employment in motor vehicles and equipment fell 7.3 percent or by 21,000 workers (seasonally unadjusted). By September, nearly all these workers were back on the reactivated assembly lines.

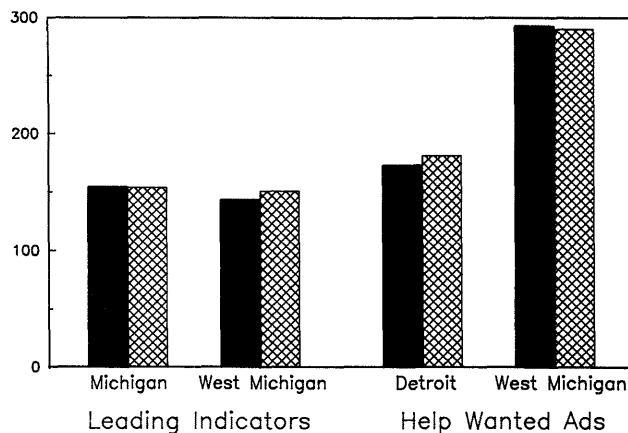
The decline in total employment caused the state's unemployment rate to rise to 7.3 percent, up from the previous quarter's rate of 7.1 percent. The state's unemployment rate, however, remained 1 full percentage point below its rate of a year ago.

The state's Index of Leading Indicators dropped a slight 0.6 percent in the third quarter. The performance of the components of the index was mixed. The average weekly hours of production workers fell 1.4 percent in the third quarter, after rising 3.2 percent in the previous period. The number of initial claims for unemployment insurance rose 2.0 percent in the third quarter. In the second quarter, initial claims plunged 12.1 percent. Finally, the number of new dwelling units put under contract rose 1.8 percent in the third quarter.

In spite of the slight downturn in the Index of Leading Indicators caused in part by employment fluctuations resulting from model changeover in the auto industry, we foresee modest employment growth for the state in the coming months. The Detroit Help-Wanted Advertising Index rose 4.6 percent in the third quarter on top of a 3.0 percent increase in the second quarter.

The nation's domestic auto makers plan to increase their output for the rest of the year. It was reported that the eight domestic auto makers intend to make 8.7 percent more cars in the fourth quarter than in the same period last year.

**Chart 3**  
**Michigan and West Michigan Indexes**  
Second Quarter ■ 1988 and Third Quarter ▨ 1988  
(1982=100)



Preliminary estimates indicate a healthy 7 percent increase in tourist spending this past summer over the previous summer, when the state attracted a record-breaking 23 million tourists.

Finally, last year (1987), an estimated 1,300 more people moved into the state than moved out. Although the number is not large, it is the first time the state had a positive net in-flow of people since 1969, and it is a dramatic improvement over 1982, when the net out-flow of individuals leaving the state reached 155,000. Luckily, no one turned out the lights.

#### **Outlook for West Michigan**

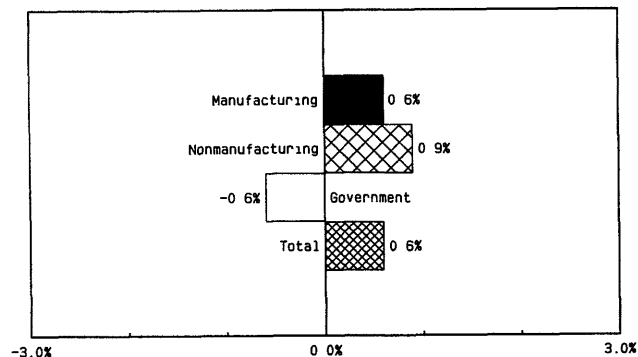
Total employment in West Michigan grew 0.6 percent in the third quarter, in spite of a downturn in government employment. Overall, we foresee sustained employment growth in West Michigan, driven by a still vigorous manufacturing sector.

Manufacturing employment grew a respectable 0.6 percent in the third quarter, outperforming its second-quarter pace of 0.3 percent. Employment in nonmanufacturing also grew a healthy 0.9 percent, falling short of its second-quarter growth of 1.1 percent. Employment in government fell 0.6 percent in the third quarter.

In spite of an overall increase in employment, the weighted average unemployment rate for the five metropolitan areas of West Michigan rose to 5.6 percent in the third quarter.

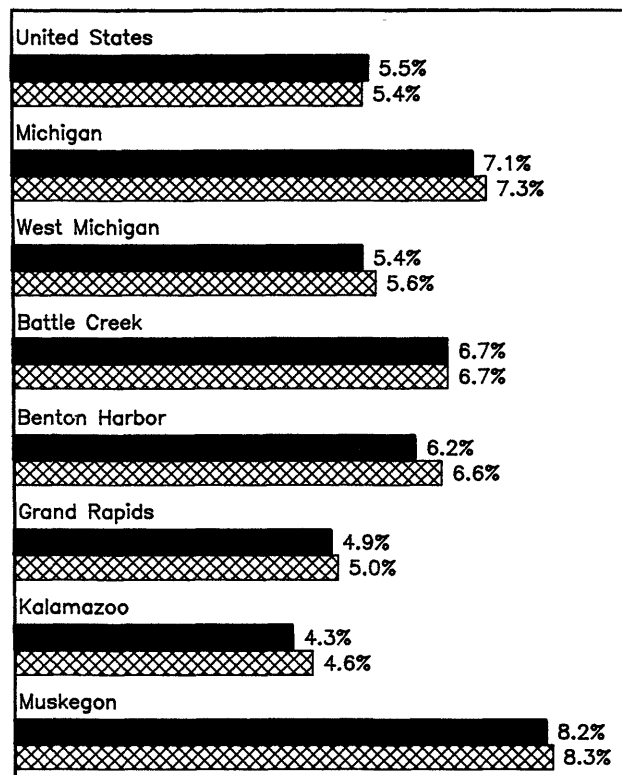
West Michigan's Index of Leading Indicators rose a sharp 4.9 percent in the third quarter. The number of initial claims for unemployment insurance dropped 7.8 percent in the quarter, while the number of new dwelling units put under contract rose a remarkable 24.5 percent. In the previous quarter, the number of new dwellings put under contract fell 12.2 percent. Average weekly hours of production workers fell a slight 0.5 percent; in the previous quarter it rose by 1.5 percent.

**Chart 4**  
**West Michigan Employment**  
Percentage Change, Third Quarter 1988



SOURCE: Based on Michigan Employment Security Commission data for 5 MSAs in West Michigan.

**Chart 5**  
**Unemployment Rates**  
Second Quarter ■ 1988 and Third Quarter ▨ 1988



The Index of Help-Wanted Advertising for West Michigan fell 1.0 percent in the third quarter. This modest downturn is surprising given the solid rise in the area's Index of Leading Indicators. In the second quarter, the Index rose a healthy 4.3 percent over the first-quarter rate, and it has grown 7.8 percent over the past year.

The summer drought may dampen future employment growth in the food product industry. It is estimated that

Allegan, Kent, Ottawa and Muskegon Counties lost over \$70 million in agricultural output. Statewide, the estimated loss is \$800 million.

The population in the five metropolitan areas of West Michigan grew 1.4 percent or by over 18,000 individuals in 1987, according to U.S. Bureau of the Census estimates. West Michigan's rural counties grew by 1.1 percent in the one-year period.

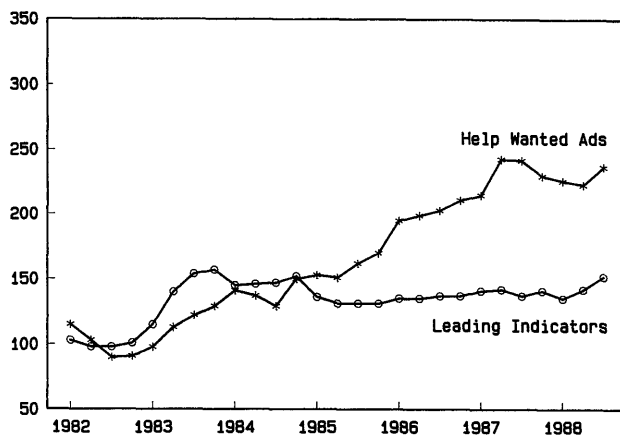


# The BUSINESS OUTLOOK for the BATTLE CREEK MSA

Total employment in the Battle Creek MSA rose a moderate 0.8 percent in the third quarter of 1988, due to robust employment growth in nonmanufacturing. We expect healthy employment growth to continue in both manufacturing and non-manufacturing through the closing months of 1988.

Employment in nonmanufacturing grew a remarkable 1.6 percent in the third quarter, on top of a 0.9 percent increase in the previous quarter. Retail trade and general services experienced the most employment growth in the quarter.

**Chart BC-1**  
**Battle Creek Indexes**  
**by Quarter - First of 1982 to Third of 1988**  
(1982=100)



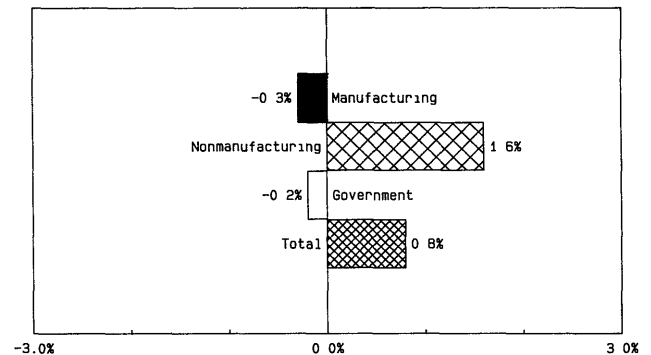
Employment in manufacturing and government declined slightly in the third quarter, however. Manufacturing employment fell 0.3 percent, after falling 0.5 percent in the previous quarter. Government employment declined a modest 0.2 percent in the third quarter.

The area's unemployment rate remained unchanged in the third quarter, matching the previous quarter's rate of 6.7 percent. The third quarter rate is 1.7 percentage points below what it was a year ago.

The area's Index of Leading Indicators rose a sharp 6.3 percent on top of a healthy 4.4 percent increase in the second quarter. All local components of the Index improved. The number of new dwelling units put under contract soared 66.0 percent in the third quarter. Dwelling units in the third quarter were up an astonishing 126.5 percent over a year ago. The number of initial claims for unemployment

insurance plunged 14.9 percent, surpassing its 12.9 percent drop in the second quarter. Finally, average weekly hours of production workers grew a modest 0.4 percent.

**Chart BC-2**  
**Battle Creek Employment**  
**Percentage Change, Third Quarter 1988**



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The area's Index of Help-Wanted Advertising also increased a healthy 6.3 percent in the third quarter, wiping out its 1.8 percent dip in the previous quarter.

The strong showing of both of these indices suggests a good likelihood of further employment growth through the remainder of 1988.

The Avtek Corporation, a small California aircraft manufacturer, announced plans to locate the production facility for its new aircraft, the Avtek 400, at the W.K. Kellogg Regional Airport. If all goes well, the facility will be in operation in 1990 and employ 1,100 workers. The Avtek 400 is a six-to-eight-passenger, twin-engine jet. The aircraft will be constructed from advanced molded composite plastic material, which makes it lighter and thus more fuel efficient and faster than standard metal body jets. The company cited the availability of airport property and the assistance from state and local officials as the major reasons for selecting Battle Creek.

Spin-offs from the aircraft facility may be limited, however, since area plastic manufacturers do not produce the type of plastic materials called for in construction of the aircraft.

**Table BC-1**  
**Battle Creek (Calhoun County) Statistics**  
 (Adjusted for seasonal variations)

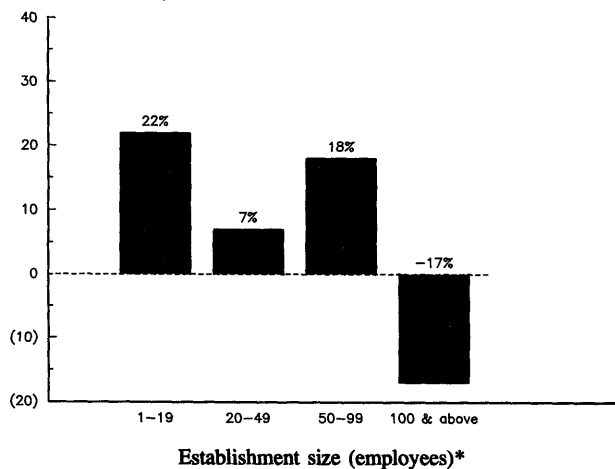
Measure	1988 third quarter	1988 second quarter	Percent change second to third	1987 third quarter	Percent change third to third
<b>Employment:</b>					
Manufacturing .....	15,200	15,240	-0.3	15,720	-3.3
Nonmanufacturing .....	31,530	31,020	1.6	28,950	8.9
Government .....	11,470	11,490	-0.2	11,520	-0.4
Total .....	58,200	57,750	0.8	56,160	3.6
<b>Unemployment:</b>					
Number unemployed .....	4,350	4,330	0.5	5,360	-18.8
Unemployment rate .....	6.7	6.7	0.0	8.3	-1.7
<b>Local indexes:</b>					
Help-wanted ads .....	237	223	6.3	245	-3.3
Leading indicators .....	152	142	7.0	137	10.9
<b>Local components:</b>					
Average weekly hours ....	42.0	41.8	0.4	42.9	-2.1
UI initial claims .....	263	309	-14.9	340	-22.6
New dwelling units <sup>a</sup> .....	335	202	66.0	148	126.5

SOURCES: W.E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Battle Creek Enquirer* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

### Battle Creek Employment Growth by Establishment Size

Percentage change 1982-1986



Since the 1982 recession, small establishments have been the source of employment growth in Battle Creek. Employment in very small establishments (1-19 employees) grew 22 percent and employment in establishments employing 50 to 99 workers increased 18 percent between 1982 and 1986. Employment in establishments with 100 or more workers dropped a significant 17 percent from 1982 to 1986. In spite of this employment decline, establishments of more than 100 workers still employed 40 percent of the total private workforce on payroll in 1986.

DATA SOURCE: County Business Patterns.

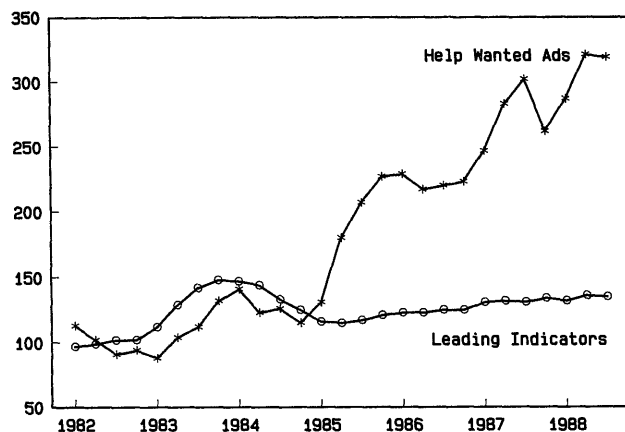
\*Excludes government, self-employed, and railroad employees.

# The BUSINESS OUTLOOK for the BENTON HARBOR MSA

Total employment in the Benton Harbor MSA grew a modest 0.3 percent in the third quarter of 1988, a slight improvement over its 0.2 percent growth in employment in the previous quarter. We foresee little change in the area's total employment in the closing months of 1988.

Employment in nonmanufacturing grew a moderate 0.6 percent in the third quarter, just half of its rate of growth in the second quarter. Substantial employment growth occurred in the area's service industry, whereas employment in retail, wholesale and finance remained constant.

**Chart BH-1**  
**Benton Harbor Indexes**  
**by Quarter - First of 1982 to Third of 1988**  
(1982=100)



Employment in manufacturing fell a slight 0.2 percent in the third quarter, which is an improvement over its second-quarter decline of 1.3 percent. Finally, government employment rose 0.2 percent, matching its second-quarter growth.

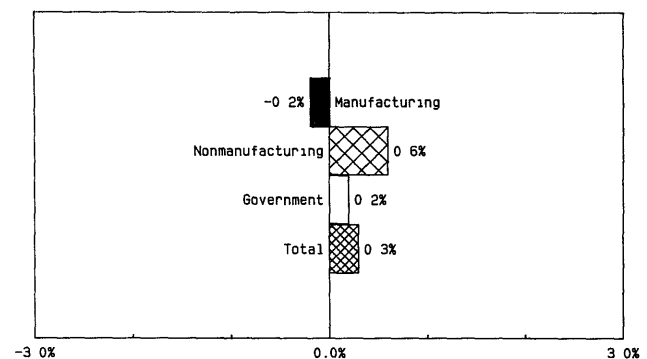
The area's unemployment rate rose four-tenths of a percent to 6.6 percent in the third quarter.

Both the area's Index of Leading Indicators and Index of Help-Wanted Advertising fell modestly in the third quarter, suggesting little change in the area's employment in the short term.

The 0.6 percent decline in the area's Index of Leading Indicators resulted from a sharp 12.1 percent decline in the

number of new dwelling units put under contract. In the previous quarter, the number of new dwelling units rose 6.9 percent. The number of initial claims for unemployment insurance remained stable and the average weekly hours of production workers rose a healthy 1.4 percent.

**Chart BH-2**  
**Benton Harbor Employment**  
**Percentage Change, Third Quarter 1988**



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The area's Index of Help-Wanted Advertising declined slightly by 0.6 percent, after climbing 10.0 percent in the previous quarter.

In manufacturing, Capitol Hardware Manufacturing announced plans to build a \$2.76 million plant which could employ 136 employees in Niles Township. On the downside, Auto Specialties Manufacturing Company (AUSCO) filed for bankruptcy under Chapter 11, leaving the future of its 350 employees in doubt. In addition, Watervliet Paper Company announced the closing of its plant, which employs 325 workers.

Elkon Brothers Limited was unsuccessful in its second effort to win a \$10 million Urban Development Action Grant. Regardless of whether Elkon succeeds in building its auto plant in Berrien County, the governments of Benton Harbor, Benton Township and the County of Berrien should be commended for their efforts. From establishing the state's only enterprise zone to offering to guarantee a portion of the lease cost of the proposed auto plant, these governments have worked hard as a team to bring this project to fruition.

Finally, Whirlpool was unable to reach agreement with the state Department of Natural Resources on an environmental cleanup plan for a 125-acre site in St. Joseph and has cancelled its plans to construct a major development there

which would have included recreational, residential, and commercial uses and activities. Soil samples from the property, once the site of a foundry, were found to contain serious amounts of PCBs and asbestos.

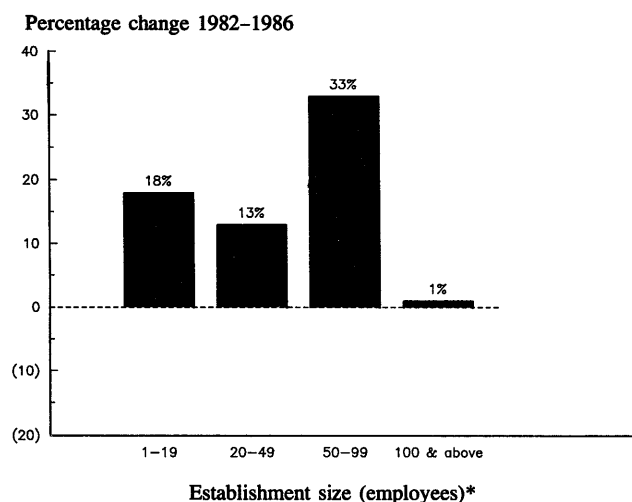
**Table BH-1**  
**Benton Harbor (Berrien County) Statistics**  
(Adjusted for seasonal variations)

Measure	1988 third quarter	1988 second quarter	Percent change second to third	1987 third quarter	Percent change third to third
<b>Employment:</b>					
Manufacturing .....	21,050	21,090	-0.2	21,250	-0.9
Nonmanufacturing .....	35,030	34,830	0.6	33,660	4.1
Government .....	8,600	8,580	0.2	8,430	2.0
Total .....	64,680	64,500	0.3	63,450	1.9
<b>Unemployment:</b>					
Number unemployed .....	5,220	4,880	7.0	5,620	-7.1
Unemployment rate .....	6.6	6.2	0.4	7.2	-0.6
<b>Local indexes:</b>					
Help-wanted ads .....	319	321	-0.6	301	6.0
Leading indicators .....	135	136	-0.7	135	0.0
<b>Local components:</b>					
Average weekly hours ....	42.4	41.8	1.4	42.8	-0.9
UI initial claims .....	256	257	-0.4	236	8.5
New dwelling units <sup>a</sup> .....	358	407	-12.1	327	9.3

SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Benton Harbor Herald Palladium* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

### Benton Harbor Employment Growth by Establishment Size



Employment growth in establishments employing 50-99 workers soared by 33 percent since the depths of the 1982 recession to 1986. There was a negligible increase in the overall employment level of establishments with 100 or more workers. These larger establishments employed 39 percent of the total private workforce in 1986; establishments with 50-99 workers employed just 12 percent of the area's private employees on payroll.

DATA SOURCE: County Business Patterns.

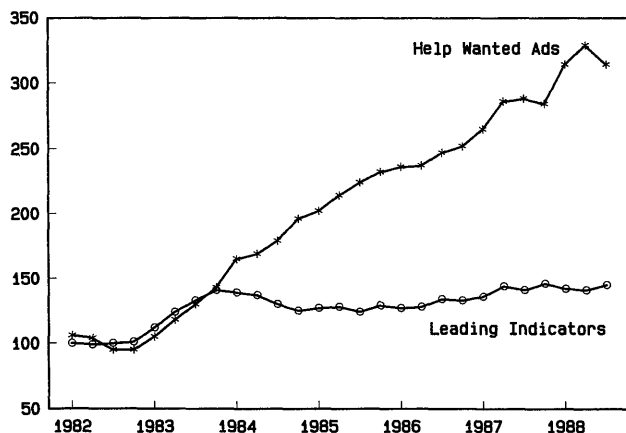
\*Excludes government, self-employed, and railroad employees.

## The BUSINESS OUTLOOK for the GRAND RAPIDS MSA

*Total employment in the Grand Rapids MSA (Kent and Ottawa Counties) grew a healthy 0.9 percent, due to strong employment growth in both manufacturing and nonmanufacturing. Led by a robust manufacturing sector, we foresee further employment growth during the closing months of 1988.*

Employment growth in the Grand Rapids private sector remained very strong in the third quarter. Employment in manufacturing grew a healthy 1.1 percent on top of an equally strong 1.0 percent growth in the previous quarter. In the nonmanufacturing sector, employment rose a healthy 1.3 percent in the third quarter. Over the past year, employment in the area's nonmanufacturing sector has grown by an outstanding 7.5 percent. Employment in government took a tumble, however, dropping 1.7 percent in the third quarter.

**Chart GR-1**  
**Grand Rapids Indexes**  
**by Quarter - First of 1982 to Third of 1988**  
(1982=100)

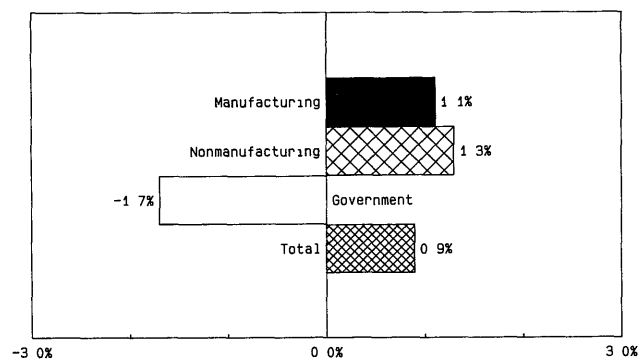


The area's unemployment rate rose a scant one-tenth of a percent to 5.0 percent in the third quarter, but it is still 1.4 percentage points below its 6.4 percent rate of a year ago.

The area's Index of Leading Indicators rose 2.8 percent, offsetting its 0.7 percent decline in the previous quarter. The number of new dwelling units put under contract grew 19.5 percent in the third quarter. This increase more than erased the 16.2 percent plunge housing contracts took in the second

quarter. The number of initial claims for unemployment insurance continued its downward trend, falling 4.7 percent in the third quarter. Average weekly hours of production workers fell 1.2 percent, however, partially eliminating its strong 2.3 percent rise in the second quarter.

**Chart GR-2**  
**Grand Rapids Employment**  
**Percentage Change, Third Quarter 1988**



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The one surprise in the third-quarter numbers is the 4.6 percent drop in the area's Index of Help-Wanted Advertising. The decline more than erased the 3.6 percent increase in the index during the second quarter. Typically, such a drop would indicate a slowing in the nonmanufacturing sector, however a slowing is not supported by the sustained rise in the area's Index of Leading Indicators. Furthermore, according to the first survey of the area's purchasing departments by the Grand Rapids Association of Purchasing Management, new orders are either up or stable for over 80 percent of the firms surveyed. We are persuaded, therefore, to discount the decline in the area's Index of Help-Wanted Advertising and predict moderate employment growth through the remaining months of 1988.

The much-publicized overflow of diluted, yet untreated sewage into the Grand River points to an economic development problem that is clearly not limited to Grand Rapids. As many as 80 other systems, including those of Detroit,

Lansing, Jackson, Benton Harbor and Saginaw, are reported to have the same or similar deficiencies. The needed improvements of all these cities' systems are not cheap, but the quality of the state's waterways and general environment must be protected if we are to achieve sustained economic growth.

Finally, groundbreaking ceremonies were held for the Applied Technology Center (ATC). The \$25.3 million facility will be shared by the Grand Rapids Junior College and Ferris State University (Big Rapids). It is the nation's first partnership between a two- and four-year school to provide technology instruction and training.

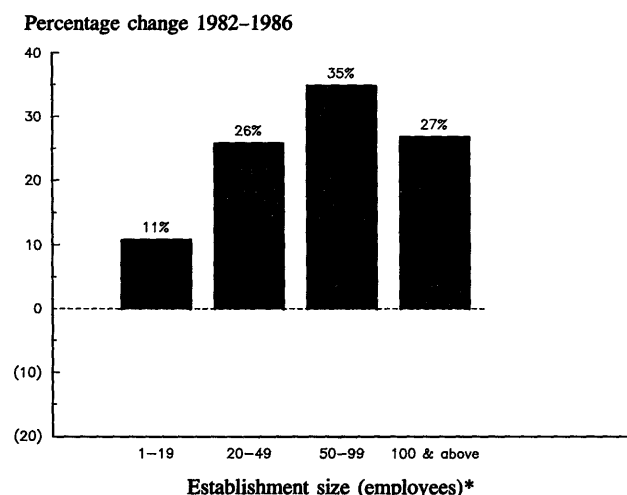
**Table GR-1**  
**Grand Rapids (Kent & Ottawa Counties) Statistics**  
(Adjusted for seasonal variations)

Measure	1988 third quarter	1988 second quarter	Percent change second to third	1987 third quarter	Percent change third to third
<b>Employment:</b>					
Manufacturing .....	99,100	97,980	1.1	93,870	5.6
Nonmanufacturing .....	194,820	192,350	1.3	181,250	7.5
Government .....	31,010	31,550	-1.7	30,950	0.2
Total .....	324,930	321,880	0.9	306,070	6.2
<b>Unemployment:</b>					
Number unemployed .....	17,930	17,150	4.5	21,920	-18.2
Unemployment rate .....	5.0	4.9	0.1	6.4	-1.4
<b>Local indexes:</b>					
Help-wanted ads .....	314	329	-4.6	289	8.7
Leading indicators .....	145	141	2.8	140	3.6
<b>Local components:</b>					
Average weekly hours ....	41.2	41.7	-1.2	39.7	3.8
UI initial claims .....	1,014	1,064	-4.7	1,038	-2.3
New dwelling units <sup>a</sup> .....	5,991	5,013	19.5	5,453	9.9

SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Grand Rapids Press* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

### Grand Rapids Employment Growth by Establishment Size



Grand Rapids experienced strong employment growth in all establishments, regardless of size, since the depths of the 1982 recession to 1986. Countering national and regional trends, the area's larger establishments outpaced its smaller ones. Establishments with 50-99 workers grew an outstanding 35 percent. Establishments with more than 100 workers employed 42 percent of the area's nongovernmental workforce on payroll in 1986; those with 1-19 workers employed only 24 percent.

DATA SOURCE: County Business Patterns.

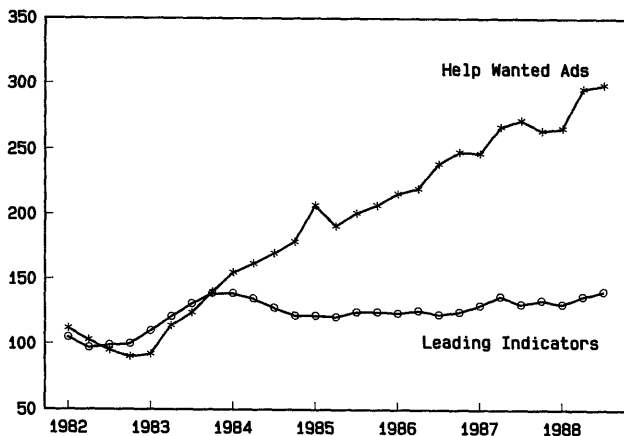
\*Excludes government, self-employed, and railroad employees.

## The BUSINESS OUTLOOK for the KALAMAZOO MSA

*Total employment in the Kalamazoo MSA grew a modest 0.2 percent in the third quarter of 1988. We foresee moderate employment growth in the area's manufacturing and non-manufacturing sectors in the coming months.*

Employment growth slowed in all three major sectors of the Kalamazoo economy in the third quarter. Employment in manufacturing grew a moderate 0.4 percent in the third quarter, slightly below its second-quarter pace of 0.5 percent. Employment in the area's nonmanufacturing sector was at a standstill in the third quarter, after growing 0.4 percent in the previous quarter. Finally, government employment increased a modest 0.3 percent in the third quarter, far below its tremendous second-quarter growth of 2.2 percent.

**Chart K-1**  
**Kalamazoo Indexes**  
**by Quarter - First of 1982 to Third of 1988**

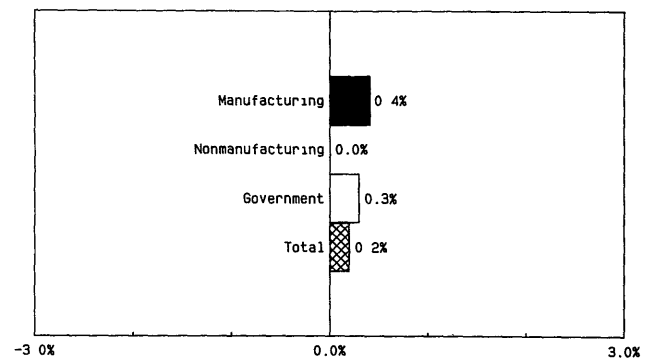


The area's unemployment rate rose three-tenths of a percent to 4.6 percent in the third quarter. The area, however, still maintains the lowest unemployment rate of all West Michigan metropolitan areas.

The area's Index of Leading Indicators grew a moderate 2.9 percent in the third quarter, after increasing a healthy 4.6 percent in the previous quarter. The number of new dwelling units put under contract soared by 44.2 percent in the third quarter. The number of initial claims for unemploy-

ment insurance fell by 6.8 percent, on top of a 13.4 percent plunge recorded in the previous quarter. The average weekly hours of production worked declined 0.7 percent in the third quarter, however.

**Chart K-2**  
**Kalamazoo Employment**  
**Percentage Change, Third Quarter 1988**



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The area's Index of Help-Wanted Advertising increased by 1.0 percent in the third quarter, on top of a healthy 8.6 percent jump in the second quarter.

In the short term, moderate employment growth is expected, with the area's unemployment rate predicted to remain below 5.0 percent. In the longer term, several developments should be noted that will have positive impacts on the area's economy. The Upjohn Company announced that it will start construction of its delayed \$122 million research and development complex in downtown Kalamazoo. The 702,000 square foot facility should be completed by 1992 and will increase by 50 percent the floor space of the company's current downtown research complex. The addition will house 587 employees.

The Upjohn Company expansion will play an important role in the financing of a new effort to improve the vitality of Kalamazoo's downtown. Downtown Kalamazoo Inc., formed by the merger of Kalamazoo's Downtown Develop-

ment Authority, the Downtown Kalamazoo Association, and Downtown Tomorrow, Inc., will provide a comprehensive approach in serving the needs of downtown businesses and in marketing the downtown area. The new organization will also run the City's parking system and take charge of the maintenance responsibilities on the downtown pedestrian

mall. Funding of the new organization will come from a proposed doubling of the current 1-mill tax now levied on downtown businesses and through the use of tax increment financing, which will allow the organization to receive the increase in property tax generated by the construction of the Upjohn research facility.

**Table K-1**  
**Kalamazoo (Kalamazoo County) Statistics**  
(Adjusted for seasonal variations)

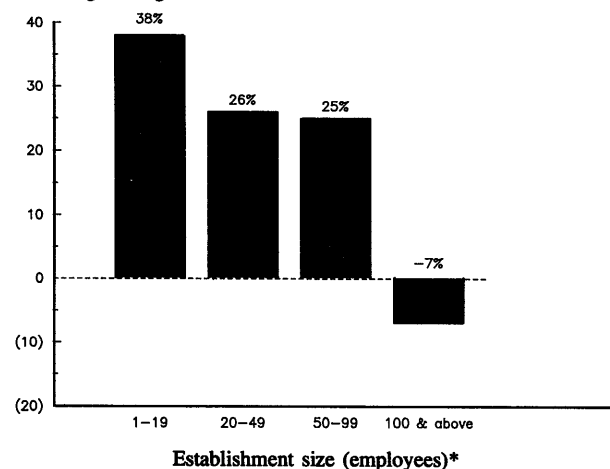
Measure	1988 third quarter	1988 second quarter	Percent change second to third	1987 third quarter	Percent change third to third
<b>Employment:</b>					
Manufacturing .....	30,140	30,010	0.4	28,670	5.1
Nonmanufacturing .....	58,520	58,540	0.0	58,310	0.4
Government .....	17,330	17,280	0.3	16,440	5.4
Total .....	105,990	105,830	0.2	103,750	2.2
<b>Unemployment:</b>					
Number unemployed .....	5,380	5,010	7.4	6,320	-14.9
Unemployment rate .....	4.6	4.3	0.3	5.5	-0.9
<b>Local indexes:</b>					
Help-wanted ads .....	299	296	1.0	270	10.7
Leading indicators .....	141	137	2.9	131	7.6
<b>Local components:</b>					
Average weekly hours ....	42.8	43.1	-0.7	42.7	0.2
UI initial claims .....	273	293	-6.8	393	-30.5
New dwelling units <sup>a</sup> .....	1,763	1,222	44.2	1,214	45.2

SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Kalamazoo Gazette* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

### Kalamazoo Employment Growth by Establishment Size

Percentage change 1982-1986



DATA SOURCE: County Business Patterns.

\*Excludes government, self-employed, and railroad employees.

Since the 1982 recession, tremendous employment growth in establishments employing fewer than 100 workers countered employment declines in establishments employing 100 or more workers. Employment in very small establishments (1-19 employees) grew an outstanding 38 percent from 1982 to 1986. In spite of a 7 percent decline in employment from 1982 to 1986, establishments with more than 100 workers employed 39 percent of the total nongovernmental workforce on payroll in 1986. Small establishments employing 1-19 workers constituted only 28 percent of the 1986 workforce.

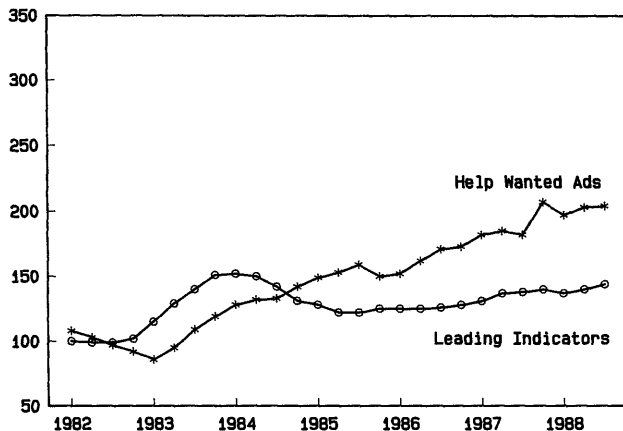


# The BUSINESS OUTLOOK for the MUSKEGON MSA

Total employment in the Muskegon MSA remained at a standstill in the third quarter of 1988. In spite of the disappointing third-quarter statistics, we foresee modest employment growth in both manufacturing and nonmanufacturing before the end of the year.

Employment in nonmanufacturing grew a modest 0.2 percent in the third quarter, on top of a healthy 0.9 percent increase in the second quarter. Employment in manufacturing fell a scant 0.1 percent, which is a modest improvement over its second-quarter decline of 0.7 percent. Finally, employment in government dropped 0.3 percent in the third quarter.

**Chart M-1**  
**Muskegon Indexes**  
**by Quarter - First of 1982 to Third of 1988**  
(1982 = 100)

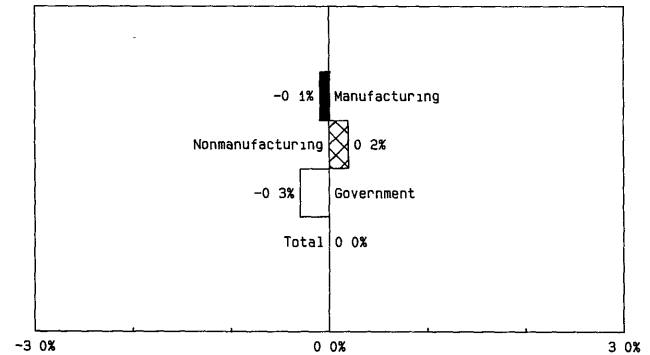


Muskegon's unemployment rate rose one-tenth of a percent to 8.3 percent in the third quarter. To put these sluggish labor market statistics in perspective, however, it should be remembered that over the past year the unemployment rate in Muskegon has fallen from 9.4 percent to the current 8.3 percent.

The area's Index of Leading Indicators rose 2.9 percent in the third quarter. Average weekly hours of production workers rose 1.2 percent on top of a 0.5 percent increase in the second quarter. The number of initial claims for unemployment insurance plunged 11.6 percent in the third quarter. Finally, the number of new dwelling units put under

contract fell 1.3 percent, offsetting its 1.0 percent growth in the second quarter.

**Chart M-2**  
**Muskegon Employment**  
**Percentage Change, Third Quarter 1988**



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The area's Index of Help-Wanted Advertising increased slightly by 0.5 percent in the third quarter. It is the second quarter of slow growth in the index, although over the past year the index has grown a healthy 11.5 percent.

For the past two quarters the area's indices have indicated moderate local economic growth. We remain optimistic that employment in the area's manufacturing and nonmanufacturing sectors will expand at a moderate rate through the closing months of 1988.

The official groundbreaking ceremonies were held at the site of SPX's \$22 million Terrace Point Development. The new SPX corporate headquarters, a 36-unit luxury condominium complex, three small office buildings, a marina and a restaurant are all planned to be constructed at the site within five years.

Construction of the new harness racetrack in Fruitport Township, located at the intersection of U.S. 31 and I-96, is proceeding, although slightly behind schedule. After serious negotiations, the Michigan Racing Commission approved 109 racing dates for the track, which is scheduled to open in the spring of 1989. The track promises to boost

the area's tourism industry and has already been credited for the planned construction of a new motel.

Finally, New Muskegon, the Muskegon Area Chamber of Commerce and the Greater Muskegon Industrial Fund, Inc.

have all agreed to merge and form the Muskegon Economic Growth Alliance (MEGA), subject to receiving IRS approval of its tax-exempt status. MEGA has the potential for providing the county with effective and comprehensive economic development leadership.

**Table M-1**  
**Muskegon (Muskegon County) Statistics**  
(Adjusted for seasonal variations)

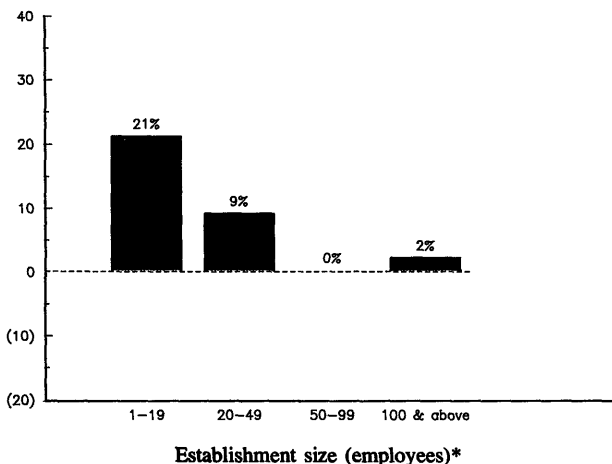
Measure	1988 third quarter	1988 second quarter	Percent change second to third	1987 third quarter	Percent change third to third
<b>Employment:</b>					
Manufacturing .....	17,240	17,250	-0.1	17,860	-3.5
Nonmanufacturing .....	30,460	30,400	0.2	29,650	2.7
Government .....	9,030	9,060	-0.3	8,780	2.8
Total .....	56,730	56,710	0.0	56,360	0.7
<b>Unemployment:</b>					
Number unemployed .....	5,720	5,510	3.8	6,450	-11.3
Unemployment rate .....	8.3	8.2	0.1	9.4	-1.1
<b>Local indexes:</b>					
Help-wanted ads .....	204	203	0.5	183	11.5
Leading indicators .....	144	140	2.9	138	4.3
<b>Local components:</b>					
Average weekly hours ....	41.3	40.8	1.2	40.6	1.7
UI initial claims .....	291	329	-11.6	331	-12.1
New dwelling units <sup>a</sup> .....	427	433	-1.3	411	3.9

SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F.W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Muskegon Chronicle* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

### Muskegon Employment Growth by Establishment Size

Percentage change 1982-1986



Since the 1982 recession, Muskegon's small business sector has played a dynamic role in job creation. Employment growth in very small establishments (employing 1-19 workers) increased a strong 21 percent from 1982 to 1986. These small establishments accounted for 31 percent of the area's nongovernmental workforce on payroll in 1986. Employment levels for establishments with more than 100 workers grew a small 2 percent; nevertheless, they employed 40 percent of the total nongovernmental workforce on payroll.

DATA SOURCE: County Business Patterns.

\*Excludes government, self-employed, and railroad employees.

## **Definitions of terms as used in this quarterly**

**Business Cycle Turning Dates:** The historical business cycle turning dates used in this report are those designated by the National Bureau of Economic Research, Inc. (NBER). They mark the approximate dates when, according to NBER, aggregate economic activity reached its cyclical high (peak) or low (trough) levels.

**Central City:** An incorporated city or urbanized area defined by the U.S. Office of Management and Budget as having the largest population in the metropolitan statistical area in 1980. For an additional city to be included in the name of an MSA, the employment/residence ratio must be at least 0.75, with out-commuting of less than 60 percent of that city's resident employed workers.

**Employment:** In this quarterly, "employment" is used instead of the more precise term, "wage and salary employment." The MESC employment data shown refer to "jobs by place of work," or nonagricultural employment.

**Manufacturing:** The estimate of the number of workers on the payrolls of privately owned firms engaged in the production of durable or nondurable goods.

**Nonmanufacturing:** The estimate of the number of workers on the payrolls of privately owned firms that provide services rather than goods. (Construction and mining are included.)

**Government:** The estimate of the number of workers on national, state, or local governmental payrolls.

**Historical data:** Monthly, quarterly, or yearly information for past periods. (Shown in appendix tables.)

**Index of Leading Indicators, State & MSAs:** A (composite) index with seven components (see Tables A-2 and A-3).

**Index of Leading Indicators, United States:** A (composite) index based on 11 major components made up of 60 series. Marginal employment adjustment measures include average weekly hours in manufacturing employment and average weekly initial UI claims. One of the two job vacancy series is Help-Wanted Advertising. New private housing units are part of the fixed capital investment component. For a complete list see *Business Conditions Digest* and the 1984 *Handbook of Cyclical Indicators*, The U.S. Department of Commerce, Bureau of Economic Analysis.

**Initial Claims:** A count of the number of new claims filed for unemployment insurance (UI) for regular state programs. Each initial claim filed indicates a new spell of unemployment for an experienced worker. In Michigan, to be eligible for benefits, an individual must have earned wages of at least 30 times the state minimum hourly wage (currently \$3.35) during not less than 20 of the 52 consecutive calendar weeks preceding the benefit year. Each such week is

termed a "credit week." An individual may qualify with as few as 14 credit weeks, however, if base period wages have been in excess of 20 times the state average weekly wage (currently \$433.91).

**Michigan Employment Security Commission (MESC):** Michigan Employment Security Commission is a state agency that administers the Job Service and the state/federal unemployment insurance programs and provides labor market information in keeping with state and federal reporting requirements.

**MSA (1983 definition):** In all but New England, one or more counties are defined as a Metropolitan Statistical Area if they contain the following: a large population nucleus (a central city or "urbanized" area) with adjacent communities which have a high degree of economic and social integration. Adjacent counties are included if they have 60 persons per square mile, and/or substantial 1970 to 1980 population growth (20 percent) with 10 percent residing within the urbanized area and a commuting pattern with 15-20 percent of residents working within the central city or urbanized area.

MSAs are also defined as **major labor market areas** by the Michigan Employment Security Commission (MESC). Those labor market areas outside of the MSAs have the peninsula or county name.

**National Purchasing Management Selected Components Indexed:** The national association conducts a monthly survey of purchasing managers from a scientifically selected sample of firms across the nation. Responses indicate only the direction of change; the percentage reporting favorable changes minus those with unfavorable changes plus 100 equals the index as shown in this quarterly. For those familiar with diffusion indexes, these indexes represent two times the percentage reporting a change in a favorable direction, e.g., more new orders. (The favorable count includes one-half of those reporting no change.)

**Time Series:** A set of numbers covering a known interval or timespan (e.g., months or quarters) that provide information about a well-defined activity, process or group. For local series that consistently change direction in advance of overall economic activity, see Table A-3. Those measuring current or past economic activity are found in Table A-4.

**Unemployed:** The number of persons in the labor force who are without a job or on layoff but not expecting to be called back. In order to be counted, an individual must be seeking work.

**Vacancy Rate:** The percentage of all housing units in existing homes or newly constructed units (visibly ready for occupancy) that are empty and therefore unoccupied. Vacancy rates in Michigan MSAs are determined by U.S. Postal Service delivery workers as part of an annual survey conducted for the Federal Home Loan Bank of Indianapolis. See Table A-5.

**Table A-1**  
**Index of Help-Wanted Advertising (1982=100)**

Area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1982	1983	1984	1985	1986	1987	1987		1988		
							III	IV	I	II	III
Battle Creek MSA.....	100	115	139	159	202	233	242	230	226	223	237
Benton Harbor MSA.....	100	109	126	186	222	273	302	262	287	321	319
Grand Rapids MSA.....	100	124	178	218	243	281	288	284	314	329	314
Kalamazoo MSA.....	100	117	166	202	231	263	271	264	266	296	299
Muskegon MSA.....	100	102	134	152	165	189	182	207	197	203	204
West Michigan, 5 MSAs.....	100	118	162	198	225	260	268	265	277	289	290
Detroit, Michigan MSA.....	100	146	163	194	194	172	170	170	168	173	181
United States.....	100	111	152	160	161	196	179	213	216	222	212

SOURCES: West Michigan indexes based on ad counts from the *Battle Creek Enquirer*, *Benton Harbor Herald Palladium*, *Grand Rapids Press*, *Kalamazoo Gazette* and *Muskegon Chronicle*; United States and Detroit indexes derived from (1967=100) series of The Conference Board.

**Table A-2**  
**Index of Leading Indicators (1982=100)**  
**(Rounded)**

Area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1982	1983	1984	1985	1986	1987	1987		1988		
							III	IV	I	II	III
Battle Creek MSA.....	100	141	147	132	136	141	137	141	135	142	152
Benton Harbor MSA.....	100	133	137	117	124	133	135	134	132	136	135
Grand Rapids MSA.....	100	127	133	127	131	141	141	146	142	141	145
Kalamazoo MSA.....	100	125	131	123	124	133	131	134	131	137	141
Muskegon MSA.....	100	134	144	125	126	137	138	140	137	140	144
West Michigan, 5 MSAs.....	100	130	138	131	134	146	145	149	144	144	151
Michigan.....	100	131	141	137	143	153	152	154	147	155	154

SOURCES: National index from U.S. Department of Commerce, all others from the W.E. Upjohn Institute.

### Technical Note

As presently constituted, the components and the range of weights used in the Indexes of Leading Indicators are as follows:

1. *Average weekly hours of production workers in manufacturing.* A separate series is used for each metropolitan area and for the State of Michigan. Weights range from .33 to .47.
2. *Initial claims for unemployment insurance (inverted).* A separate series is used for each metropolitan area and for the State of Michigan. Weights range from .08 to .12.
3. *New dwelling units put under contract (4-term trailing average).* A separate series is used for each metropolitan area and for the State of Michigan. Weights range from .03 to .11.

In addition, each area's index includes the following national measures:

4. *The proportion of firms reporting an increase in new orders.* Weights range from .09 to .12.
5. *The proportion of firms reporting an increase in purchased materials prices.* Weights range from .10 to .12.
6. *The proportion of firms reporting an increase in purchased material inventories.* Weights range from .08 to .12.
7. *The proportion of firms reporting a change in vendor performance (slower delivery time).* Weights range from .09 to .13.

**Table A-3**  
**Components of the Index of Leading Indicators**

<b>1. Average Weekly Hours of Production Workers</b>											
Area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1983	1984	1985	1986	1987	1987		1988		
							III	IV	I	II	III
Battle Creek MSA.....	41.3	42.0	42.7	41.8	41.9	43.3	43.0	43.9	42.3	41.8	42.0
Benton Harbor MSA.....	39.9	42.1	42.3	39.7	41.0	40.8	43.1	40.0	41.3	41.8	42.4
Grand Rapids MSA.....	39.9	41.2	41.7	41.0	40.7	40.1	39.7	40.5	40.7	41.7	41.2
Kalamazoo MSA.....	40.4	42.0	42.4	43.1	43.1	42.9	42.9	42.9	42.5	43.1	42.8
Muskegon MSA.....	41.4	41.1	42.0	40.4	40.4	40.9	40.8	41.2	40.6	40.8	41.3
West Michigan, 5 MSAs.....	40.3	41.5	42.0	41.2	41.2	41.0	40.9	41.2	41.2	41.8	41.6
Michigan.....	40.1	42.5	43.2	43.1	42.6	42.2	41.5	42.4	42.3	43.6	43.0
United States.....	39.7	40.1	40.7	40.5	40.7	40.9	41.0	41.0	41.0	41.1	41.1

<b>2. Initial Claims for Unemployment Insurance (Average per week)</b>											
Area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1983	1984	1985	1986	1987	1987		1988		
							III	IV	I	II	III
Battle Creek MSA.....	689	348	347	299	304	313	342	310	356	309	263
Benton Harbor MSA.....	366	220	201	237	259	236	243	224	257	257	256
Grand Rapids MSA.....	1,504	1,323	1,068	1,147	1,152	1,019	1,043	967	1,105	1,064	1,014
Kalamazoo MSA.....	599	415	299	308	329	336	378	307	334	329	273
Muskegon MSA.....	658	332	283	389	397	351	334	322	338	329	291
West Michigan, 5 MSAs.....	3,817	2,637	2,198	2,381	2,440	2,257	2,351	2,134	2,366	2,275	2,098
Michigan.....	37,942	21,135	16,407	15,624	17,765	17,020	16,704	15,967	19,094	16,931	17,273
United States.....	483,180	440,170	376,050	394,260	372,650	325,640	319,210	296,090	315,810	305,390	304,810

<b>3. New Dwelling Units - Put Under Contract</b>											
Area	Annual averages (Selected years)						By quarter (Seasonally adjusted annual rate)				
	1980	1983	1984	1985	1986	1987	1987		1988		
							III	IV	I	II	III
Battle Creek MSA.....	219	360	432	223	257	181	156	160	156	202	335
Benton Harbor MSA.....	a	364	363	278	418	361	324	367	375	407	358
Grand Rapids MSA.....	3,121	2,815	3,268	4,569	4,963	5,564	5,484	6,150	5,985	5,013	5,991
Kalamazoo MSA.....	1,369	794	613	1,007	1,015	1,188	1,332	966	1,066	1,222	1,763
Muskegon MSA.....	500	329	415	410	393	416	408	413	421	433	427
West Michigan, 5 MSAs.....	a	4,662	5,091	6,487	7,046	7,756	7,704	8,304	8,167	7,234	9,008
Michigan.....	33,113	25,909	32,220	39,269	47,601	51,374	48,648	40,474	43,942	48,358	49,227

<b>4. National Purchasing Management Survey (Selected components indexed)<sup>b</sup></b>											
Component	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1983	1984	1985	1986	1987	1987		1988		
							III	IV	I	II	III
4. New orders.....	91	128	115	105	112	123	126	123	117	119	118
5. Change in inventories.....	83	95	103	88	89	97	95	100	95	101	102
6. Vendor performance.....	81	113	115	96	101	91	82	75	77	78	89
7. Changes in material prices..	147	121	123	91	103	143	153	158	159	162	153

SOURCES: Average weekly hours and initial claims based on information from Michigan Employment Security Commission; number of housing units put under contract, F.W. Dodge Division, McGraw Hill Information Systems Company; survey data from the National Association of Purchasing Management. Seasonal adjustment by the Institute.

a. Not available.

b. Survey results shown here are based on percent reporting conditions favorable to economic growth minus percent reporting conditions unfavorable to economic growth plus 100.

**Table A-4**  
**Employment Data for West Michigan MSAs and Michigan**  
(Thousands of jobs - by place of work)

<b>Total Employment<sup>a</sup></b>											
<b>Labor market area</b>	<b>Annual averages (Selected years)</b>						<b>By quarter (Adjusted for seasonal variations)</b>				
	1980	1983	1984	1985	1986	1987	<b>1987</b>		<b>1988</b>		
							<b>III</b>	<b>IV</b>	<b>I</b>	<b>II</b>	<b>III</b>
Battle Creek MSA.....	55.2	50.9	53.0	54.2	55.0	56.1	56.2	56.6	57.4	57.8	58.2
Benton Harbor MSA.....	60.8	55.5	57.8	59.0	62.0	63.3	63.5	64.2	64.2	64.5	64.7
Grand Rapids MSA.....	266.1	266.6	283.2	293.4	300.3	306.0	306.0	311.6	317.5	321.9	324.9
Kalamazoo MSA.....	95.6	92.1	94.8	97.2	101.3	103.7	103.8	104.2	105.2	105.8	106.0
Muskegon MSA.....	56.4	50.4	53.7	55.2	56.2	56.0	56.4	56.7	56.5	56.7	56.7
West Michigan, 5 MSAs.....	534.1	515.5	542.4	559.1	574.7	585.1	585.8	593.4	601.4	606.6	610.5
Michigan.....	3,442.8	3,223.1	3,381.0	3,505.3	3,639.3	3,798.1	3,679.8	3,724.0	3,722.6	3,747.2	3,740.2
<b>Private Manufacturing Employment</b>											
<b>Labor market area</b>	<b>Annual averages (Selected years)</b>						<b>By quarter (Adjusted for seasonal variations)</b>				
	1980	1983	1984	1985	1986	1987	<b>1987</b>		<b>1988</b>		
							<b>III</b>	<b>IV</b>	<b>I</b>	<b>II</b>	<b>III</b>
Battle Creek MSA.....	18.0	14.3	14.8	14.9	15.0	15.5	15.7	15.5	15.3	15.2	15.2
Benton Harbor MSA.....	21.5	19.2	20.0	20.5	21.5	21.3	21.3	21.5	21.4	21.1	21.1
Grand Rapids MSA.....	89.0	86.8	95.1	99.0	94.5	94.2	93.8	95.6	96.9	98.0	99.1
Kalamazoo MSA.....	28.5	27.1	28.3	29.1	29.2	29.2	28.7	29.6	29.9	30.0	30.1
Muskegon MSA.....	19.7	16.6	18.7	19.4	18.1	17.7	17.9	17.6	17.3	17.3	17.2
West Michigan, 5 MSAs.....	176.7	163.9	176.9	182.8	178.3	177.9	177.3	179.6	181.1	181.6	182.7
Michigan.....	998.9	880.5	962.8	984.3	998.2	966.7	950.9	959.1	931.8	934.8	929.5
<b>Private Nonmanufacturing Employment</b>											
<b>Labor market area</b>	<b>Annual averages (Selected years)</b>						<b>By quarter (Adjusted for seasonal variations)</b>				
	1980	1983	1984	1985	1986	1987	<b>1987</b>		<b>1988</b>		
							<b>III</b>	<b>IV</b>	<b>I</b>	<b>II</b>	<b>III</b>
Battle Creek MSA.....	27.2	25.8	26.9	27.9	28.6	29.1	28.9	29.7	30.7	31.0	31.5
Benton Harbor MSA.....	30.4	28.5	29.8	30.5	32.1	33.5	33.7	34.2	34.3	34.8	35.0
Grand Rapids MSA.....	144.5	151.2	159.4	165.0	175.2	180.7	181.2	184.5	189.2	192.4	194.8
Kalamazoo MSA.....	50.3	49.8	51.4	52.6	56.1	58.0	58.6	57.7	58.3	58.5	58.5
Muskegon MSA.....	27.3	25.7	27.1	28.3	29.3	29.7	29.7	30.0	30.1	30.4	30.5
West Michigan, 5 MSAs.....	279.7	281.0	294.5	304.2	321.3	330.9	332.1	336.3	342.9	347.1	350.3
Michigan.....	1,816.1	1,772.8	1,851.3	1,941.3	2,044.5	2,114.5	2,123.7	2,148.5	2,167.3	2,189.0	2,195.7
<b>Government Employment</b>											
<b>Labor market area</b>	<b>Annual averages (Selected years)</b>						<b>By quarter (Adjusted for seasonal variations)</b>				
	1980	1983	1984	1985	1986	1987	<b>1987</b>		<b>1988</b>		
							<b>III</b>	<b>IV</b>	<b>I</b>	<b>II</b>	<b>III</b>
Battle Creek MSA.....	10.1	10.8	11.3	11.5	11.4	11.5	11.5	11.5	11.4	11.5	11.5
Benton Harbor MSA.....	9.0	7.9	8.0	8.1	8.5	8.5	8.5	8.5	8.5	8.6	8.6
Grand Rapids MSA.....	32.3	28.5	28.7	29.4	30.6	31.1	31.0	31.6	31.4	31.6	31.0
Kalamazoo MSA.....	16.8	15.2	15.1	15.6	16.0	16.5	16.5	16.7	17.0	17.3	17.3
Muskegon MSA.....	9.4	8.1	7.9	7.6	8.7	8.8	8.8	9.1	9.1	9.1	9.0
West Michigan, 5 MSAs.....	77.6	70.5	70.9	72.1	75.1	76.4	76.4	77.5	77.4	77.9	77.5
Michigan.....	627.8	570.0	567.2	579.8	596.6	606.3	605.1	618.7	623.5	623.5	615.1

SOURCE: Michigan Employment Security Commission. Seasonal adjustments by the Institute.

a. Detail may not add to totals because of rounding.

**Table A-5**  
**Vacancy Rates for Selected Metropolitan Statistical Areas (MSAs) in Michigan**

MSA	Total existing housing units					
	End date of survey	All types	Single family	Single family attached	Multi-family	Mobile home
Ann Arbor .....	03/16/88	3.1	1.1	4.6	5.8	3.5
Battle Creek .....	10/08/87	3.2	2.1	8.4	8.3	3.1
Benton Harbor .....	04/05/88	2.8	2.1	3.8	4.8	7.1
Detroit .....	01/17/88	2.2	1.5	4.4	4.5	1.6
Flint .....	02/19/88	3.5	2.6	4.0	7.0	4.9
Grand Rapids .....	03/15/88	2.5	1.4	4.3	6.0	1.7
Jackson .....	05/12/88	2.6	1.8	4.6	6.1	1.8
Kalamazoo .....	02/19/88	3.3	2.0	7.3	5.7	5.7
Lansing .....	10/10/87	2.6	2.0	3.1	4.2	2.9
Muskegon .....	05/14/88	2.4	2.0	13.6	2.7	1.5
Saginaw-Bay City-Midland .....	11/17/86	2.5	2.1	3.8	4.3	2.8

MSA	Existing housing units plus units under construction					
	End date of survey	All types	Single family	Single family attached	Multi-family	Mobile home
Ann Arbor .....	03/16/88	4.7	1.7	8.3	8.4	n.a.
Battle Creek .....	10/08/87	3.4	2.2	8.6	8.7	n.a.
Benton Harbor .....	04/05/88	3.2	2.3	5.9	5.9	n.a.
Detroit .....	01/17/87	3.1	1.9	6.4	7.0	n.a.
Flint .....	02/19/88	3.7	2.7	5.8	7.2	n.a.
Grand Rapids .....	03/15/88	3.4	1.9	6.0	8.5	n.a.
Jackson .....	05/12/88	3.4	1.9	5.2	10.5	n.a.
Kalamazoo .....	02/19/88	4.0	2.2	7.4	7.7	n.a.
Lansing .....	10/10/87	3.2	2.5	3.6	5.4	n.a.
Muskegon .....	05/14/88	2.7	2.3	14.1	3.1	n.a.
Saginaw-Bay City-Midland .....	11/17/86	2.7	2.2	4.1	4.8	n.a.

SOURCE: Federal Home Loan Bank of Indianapolis.

NOTE: Vacancy rates for United States are not strictly comparable. In 1987/88 vacancy rates published by U.S. Department of Commerce show rental housing vacancy rates for the third, fourth, first and second quarters of 1987/88 at 8.1, 7.5, 8.0 and 7.7 percent. Homeowner housing vacancy rates for same periods were 1.7, 1.6, 1.6 and 1.6 percent.

**Table A-6**  
**Population by Sex and Age**  
**Michigan and Five Metro Areas in West Michigan**

Area		Percent Distribution						
		Males	Females	0-14	15-19	20-34	35-64	Over 64
Michigan .....	1985	48.8	51.2	22.6	8.5	26.4	31.9	10.6
	1980	48.8	51.2	24.0	9.7	26.0	30.5	9.8
Metropolitan (MSAs):								
Battle Creek .....	1985	48.5	51.5	22.6	7.9	24.5	33.1	11.9
	1980	48.5	51.5	23.3	9.4	24.0	32.0	11.3
Benton Harbor .....	1985	47.9	52.1	23.4	8.3	23.7	32.6	12.0
	1980	48.3	51.7	24.8	9.6	23.7	31.0	10.9
Grand Rapids .....	1985	48.6	51.4	23.9	8.2	28.2	29.9	9.8
	1980	48.5	51.5	24.4	10.1	27.0	28.7	9.8
Kalamazoo .....	1985	48.8	51.2	21.2	8.9	31.0	29.9	9.0
	1980	48.4	51.6	21.6	10.5	30.6	28.4	8.9
Muskegon .....	1985	48.5	51.5	23.7	8.2	25.3	31.2	11.6
	1980	48.4	51.6	24.5	10.0	24.3	30.5	10.7

SOURCE: Michigan Department of Management and Budget, Office of Revenue and Tax Analysis.

**Table A-7**  
**Average Residential Contract Mortgage Rates in Michigan**

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
1982.....	17.30	17.47	17.40	17.49	17.43	17.37	17.29	17.15	16.24	15.83	14.72	14.28
1983.....	13.94	13.71	13.54	12.96	12.90	12.81	13.12	13.48	14.31	14.28	14.17	14.16
1984.....	14.11	13.77	13.79	14.10	14.37	15.02	15.15	14.99	14.84	14.75	14.25	14.19
1985.....	14.05	13.77	13.88	13.84	13.73	12.94	12.72	12.80	12.66	12.69	12.58	12.13
1986.....	11.46	11.46	10.92	10.81	10.79	11.19	11.24	11.12	10.90	10.84	10.73	10.49
1987.....	10.25	9.97	9.92	10.06	11.04	11.36	11.01	10.83	11.18	11.50	11.20	11.10
1988.....	11.05	10.52	10.45	10.53	10.73	10.99	10.87	10.97	11.06	...	...	...

SOURCE: Business Information Division, Federal Home Loan Bank of Indianapolis.

NOTE: The contract rate shown is for 75 percent loan-to-value ratio, 25-year maturity loans on new single family homes. Alternative plans that allow mortgage rates to be adjusted, varied, blended, or shared can be arranged at lower rates.

**Table A-8**  
**Consumer Price Index**

Consumer Price Index (CPI), U.S. City Average (1982-84=100)													
Year	Annual Avg.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CPI for All Urban Consumers (CPI-U)													
1980	82.4	77.8	78.9	80.1	81.0	81.8	82.7	82.7	83.3	84.0	84.8	85.5	86.3
1981	90.9	87.0	87.9	88.5	89.1	89.8	90.6	91.6	92.3	93.2	93.4	93.7	94.0
1982	96.5	94.3	94.6	94.5	94.9	95.8	97.0	97.5	97.7	97.9	98.2	98.0	97.6
1983	99.6	97.8	97.9	97.9	98.6	99.2	99.5	99.9	100.2	100.7	101.0	101.2	101.3
1984	103.9	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3
1985	107.6	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3
1986	109.6	109.6	109.3	108.8	108.6	108.9	109.5	109.5	109.7	110.2	110.3	110.4	110.5
1987	113.6	111.2	111.6	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4
1988	...	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	...	...	...
CPI for Urban Wage Earners and Clerical Workers (CPI-W)													
1980	82.9	78.3	79.4	80.5	81.4	82.3	83.2	83.3	83.8	84.6	85.3	86.1	86.9
1981	91.4	87.5	88.5	89.0	89.6	90.3	91.1	92.2	92.8	93.7	93.9	94.1	94.4
1982	96.9	94.7	95.0	94.8	95.2	96.2	97.4	98.0	98.2	98.3	98.6	98.4	98.0
1983	99.8	98.1	98.1	98.4	99.0	99.5	99.8	100.1	100.5	101.0	101.2	101.2	101.2
1984	103.3	101.6	101.8	101.8	102.1	102.5	102.8	103.2	104.2	104.8	104.8	104.7	104.8
1985	106.9	104.9	105.4	105.9	106.3	106.7	107.0	107.1	107.3	107.6	107.9	108.3	108.6
1986	108.6	108.9	108.5	107.9	107.6	107.9	108.4	108.4	108.6	109.1	109.1	109.2	109.3
1987	112.5	110.0	110.5	111.0	111.6	111.9	112.4	112.7	113.3	113.8	114.1	114.3	114.2
1988	...	114.5	114.7	115.1	115.7	116.2	116.7	117.2	117.7	118.5	...	...	...

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

NOTES: Monthly data are shown above unadjusted for seasonal variations. Unadjusted CPI data are used extensively for escalation purposes. Although the CPI is often called the "Cost-of-Living Index," it measures only price change, which is just one of several important factors affecting living costs. All CPI series are linked historically to the original CPI Index for Urban Wage Earners and Clerical Workers.

These series contain no revision but are reprinted for the convenience of the user.

PERCENT CHANGE: Movements of these indexes from one time period to another are usually expressed as percent changes rather than changes in index points. Index point changes are affected by the level of the index in relation to its base period while percent changes are not. Examples of computation follow:

$$\frac{100 \times 108.6 \text{ (1986 annual avg.)} - 106.9 \text{ (1985 annual avg.)}}{106.9 \text{ (1985 annual avg.)}} = 1.6\% \text{ change 1985 to 1986, CPI-W.}$$

$$\frac{100 \times 109.3 \text{ (1986 December)} - 108.6 \text{ (1985 December)}}{108.6 \text{ (1985 December)}} = 0.6\% \text{ change December 1985 to December 1986, CPI-W.}$$

$$\frac{100 \times 110.0 \text{ (1987 January)} - 109.3 \text{ (1986 December)}}{109.3 \text{ (1986 December)}} = 0.6\% \text{ change December 1986 CPI-W to January 1987, CPI-W.}$$



**Table A-9**  
**Selected Labor Market Indicators**  
(Not adjusted for seasonal variations)

Area	Average for manufacturing production workers <sup>a</sup> September 1988			Civilian labor force unemployment rate <sup>b</sup>	
	Weekly hours	Hourly earnings	Weekly earnings	June 1988	September 1988
United States.....	41.4	\$10.27	\$425.2	5.5	5.2
Michigan.....	43.8	13.43	588.2	7.1	6.6
West Michigan MSAs:					
Battle Creek.....	43.2	14.88	642.8	7.2	6.1
Benton Harbor.....	43.6	9.91	432.0	6.3	6.2
Grand Rapids.....	41.7	11.44	477.0	5.2	4.5
Kalamazoo.....	43.0	12.80	555.4	4.4	4.7
Muskegon.....	41.1	12.06	495.7	8.7	8.0
Other MSAs:					
Ann Arbor.....	47.2	14.63	690.5	3.7	3.6
Detroit.....	44.8	14.53	650.9	7.3	6.9
Flint.....	44.0	16.83	740.5	14.6	12.9
Jackson.....	43.2	9.94	429.4	6.7	6.7
Lansing-E. Lansing.....	43.9	14.70	645.3	5.5	5.1
Saginaw-Bay City-Midland.....	44.2	15.34	678.0	6.7	6.2
Other Areas:					
Upper Peninsula.....	41.3	10.33	426.6	7.1	6.3

SOURCES: U.S. Department of Labor and the Michigan Employment Security Commission (MESCC) (most recent benchmark).

a. Preliminary. Earnings include overtime and part-time wages.

b. Seasonally adjusted rate for U.S. was 5.3 percent in June and 5.4 percent in September 1988. Seasonally adjusted rate for Michigan was 7.0 in June and 7.2 percent in September 1988.

**Table A-10**  
**Commercial Banking Data**  
**Third Quarter 1988**  
(In thousands of current dollars)

	Metropolitan (MSAs) <sup>a</sup>				
	Battle Creek	Benton Harbor	Grand Rapids	Kalamazoo	Muskegon
Total deposits.....	\$178,087	\$979,277	\$5,323,221	\$1,735,023	\$745,656
Total transaction accounts <sup>b</sup> .....	59,807	254,260	1,217,237	498,795	192,143
Nontransaction savings <sup>c</sup> .....	68,935	262,854	1,583,498	623,994	256,195
Time deposits < \$100,000.....	42,205	362,229	1,765,940	491,788	254,943
Time deposits > \$100,000 <sup>d</sup> .....	7,140	99,934	756,546	105,691	41,297
Total assets.....	199,510	1,089,056	6,442,997	2,072,836	835,616
Total loans.....	75,021	728,155	4,099,870	1,307,909	422,562
Agriculture.....	618	13,856	55,701	29,767	1,017
Business.....	7,750	164,886	1,324,202	328,444	102,282
Consumer.....	8,831	161,091	883,490	297,256	96,683
Government.....	626	15,930	168,481	100,459	16,754
Real estate.....	55,065	367,302	1,621,471	527,779	203,842
Other <sup>e</sup> .....	2,131	5,090	46,525	24,204	1,984

SOURCE: Federal Reserve Bank of Chicago.

a. Reported data includes deposits and assets in all branches of banks with home offices in the five metropolitan statistical areas (MSAs).

b. Total transaction accounts include demand deposits, automated teller accounts, and NOW accounts.

c. Nontransaction savings include money market depository accounts (MMDA) and IRAs.

d. This category includes both time certificates and open-time certificates over \$100,000.

e. Includes loans made to depository institutions, leases, and bankers acceptances, and unearned income.

**Table A-11**  
**Population and Income Update for Selected Areas**

Area	Population				Per Capita Income			
	1987 <sup>a</sup>	1980	Change	% change	1985	1979	% change current dollars	% change constant dollars
Michigan .....	9,200,000	9,262,078	(62,078)	-0.7	10,902	7,688	41.8	-4.3
West Michigan.....	1,710,700	1,646,402	64,298	3.9	10,006	7,072	41.5	-4.5
Metropolitan (MSAs)								
6-county total.....	1,336,600	1,284,480	52,120	4.1	10,301	7,240	42.3	-4.0
Battle Creek MSA.....	137,600	141,557	(3,957)	-2.8	9,986	7,211	38.5	-6.6
Benton Harbor MSA.....	164,800	171,276	(6,476)	-3.8	9,365	6,728	39.2	-6.1
Kalamazoo MSA.....	218,500	212,378	6,122	2.9	11,245	7,769	44.7	-2.3
Grand Rapids MSA.....	657,000	601,680	55,320	9.2	10,639	7,437	43.0	-3.5
Kent County.....	482,000	444,506	37,494	8.4	10,727	7,522	42.6	-3.8
Ottawa County.....	175,000	157,174	17,826	11.3	10,397	7,198	44.4	-2.5
Muskegon MSA.....	158,700	157,589	1,111	0.7	8,848	6,358	39.2	-6.1
Nonmetropolitan								
7-county total.....	374,100	361,922	12,178	3.4	8,952	6,476	38.2	-6.7
Allegan.....	87,900	81,555	6,345	7.8	9,346	6,744	38.6	-6.5
Barry.....	48,500	45,781	2,719	5.9	9,752	6,965	40.0	-5.5
Branch.....	39,800	40,188	(388)	-1.0	8,591	6,449	33.2	-10.1
Cass.....	48,300	49,499	(1,199)	-2.4	8,833	6,481	36.3	-8.0
Oceana.....	22,600	22,002	598	2.7	7,479	5,627	32.9	-10.3
St. Joseph.....	59,200	56,083	3,117	5.6	9,183	6,473	41.9	-4.3
Van Buren.....	67,800	66,814	986	1.5	8,453	6,108	38.4	-6.6

SOURCES: State of Michigan Department of Management and Budget and U.S. Bureau of the Census, 1987 County Estimates.

NOTE: Battle Creek MSA is Calhoun County; Benton Harbor MSA is Berrien County; Kalamazoo MSA is Kalamazoo County; and Muskegon MSA is Muskegon County.

a. 1987 population figures are estimates.



# Subscriptions to

## ***BUSINESS OUTLOOK***

\$20 for one year (four quarterly issues).

As a special incentive, subscribers to **Business Outlook** can also receive a year's subscription to **Michigan Business**, a monthly magazine for business owners and executives, at no additional cost.

To subscribe call (616) 343-5541 or write:

W. E. Upjohn Institute  
300 S. Westnedge Avenue  
Kalamazoo, MI 49007

W. E. Upjohn  
**INSTITUTE**  
for Employment Research

